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ANNUAL REPORT
OF
OCEANOGRAPHIC OBSERVATIONS

海 洋 調 査 年 報

VOLUME 10

1961

國 立 水 產 振 興 院
Fisheries Research and Development Agency
The Republic of Korea
Pusan, Korea
December, 1964

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凡　例

時　　刻：大韓民國 標準時(東經 135 度)임.

水　　温：攝氏度數(℃)이며 示度는 百分之壹임.

鹽　　分：千分率(‰)로 表示됨.

水　　深：*m*法으로 表示됨.

透 明 度：透明度板에 依한 測定値로써 *m* 法으로 表示됨.

水　　色：Forel 水色標準液의 水色番號(1～11) 임.

波　　浪：10 階級法(0～9)에 依함.

音　　니：4 階級法(0～3)에 依함. 波高는 0=0 *m*, 1=2 *m* 未滿, 2=2～4 *m*, 3=4 *m* 以上

氣　　温：攝氏度數(℃)이며 示度는 拾分之壹임.

氣　　壓：Aneroid 氣壓計에 依한 觀測値이며 *mm*로 表示됨.

風　　：風向은 16方位法(磁針方位)에 依함.

風力은 Beaufort 風力階級에 依함.

雲　　：雲形은 十種雲形法에 依함.

雲量은 天空의 十等分法에 依함.

天　　氣：快晴(B)=雲量 0 ～ 2, 晴(BC)=雲量 3 ～ 7, 曇(C)=雲量 8 ～ 10, 雨(R),

霧(F), 雪(S) 等으로 區分됨.

浮游生物："+" 標는 浮游生物이 存在한다는 表示임.

EXPLANATIONS

Time : Korean Standard Time used the mean solar time referred to the meridian of 135° E.

Water Temperature: Recorded in hundredths of a degree in Centigrade.

Salinity : Expressed in parts per thousandth, determined by the Knudsen method.

Depth : Expressed in meters determined by the wire length and its angle.

Transparency : Expressed in meters determined by the Secchi disk.

Color of the sea : Recorded in numbers of Forel Scale.

Wind Wave : Expressed in the scale (0~9).

Swell : Expressed in the scale (0~3). The scale and the wave height are as follows: 0=0 m, 1=less than 2 m, 2=2~4 m, 3=greater than 4 m.

Air Temperature : Recorded in tenths of a degree in Centigrade.

Air Pressure : Recorded in mm obtained from the direct reading of Aneroid Barometers.

Wind Direction : Given in 16 point scale of the compass bearing.

Velocity : Given in Beaufort Scale.

Cloud Type : Recorded in ten types of cloud.

Cover : Expressed in tenths of the whole sky covered.

Weather : Recorded in present weather. The weather and the cloud cover are as follows: B=0~2, BC=3~7, C=8~10.

Plankton : "+" indicates the existence of plankton organisms.

제 1 편

연안정지 해양관측성적

PART 1

CO. ASTAL OB OCEANOGRAPHIC OBSERVATIONS

1961

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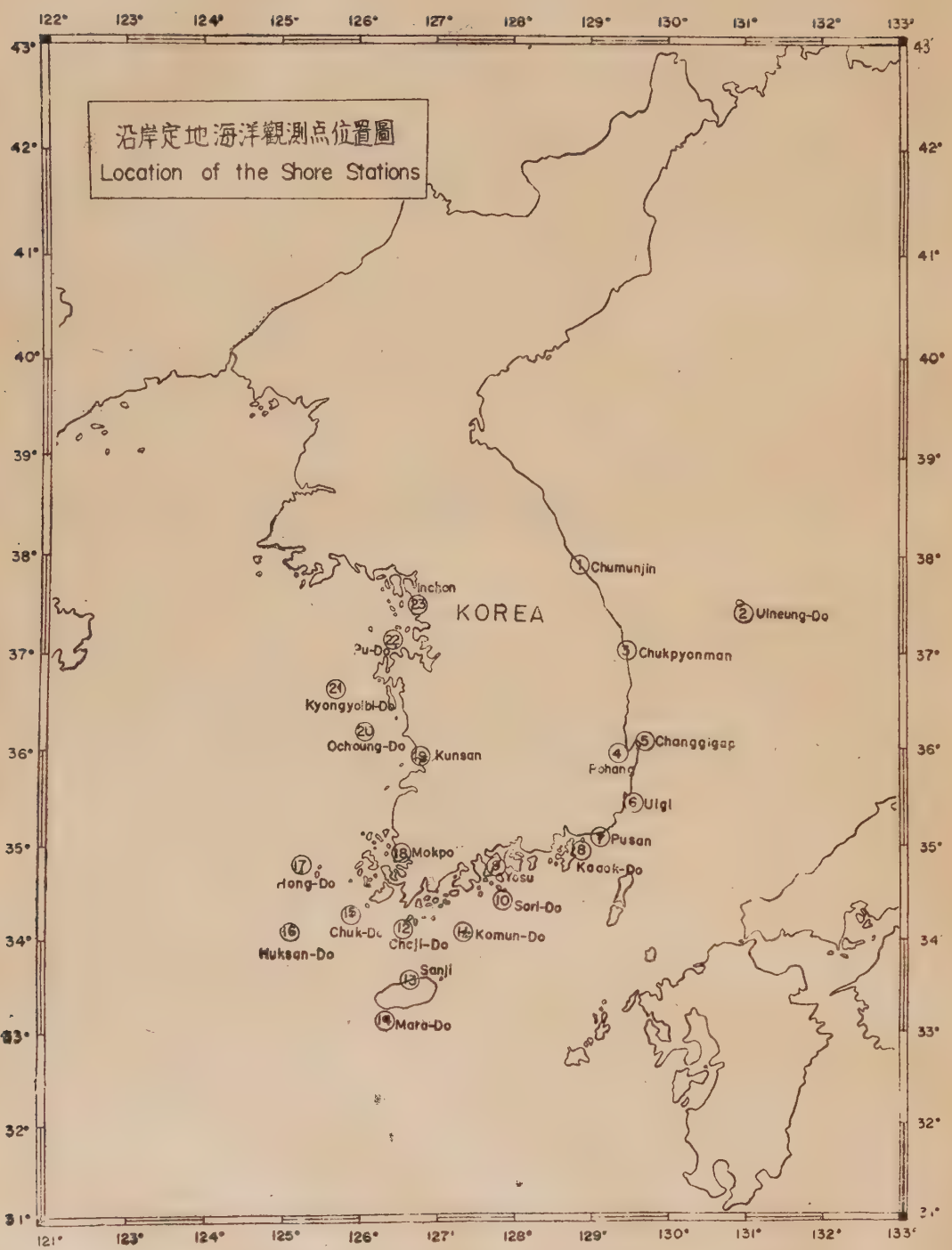
沿岸定地海洋觀測点位置圖
Location of the Shore Stations
KOREA
1 Chumunjin
2 Ulneung-Do
3 Chukpyonman
4 Pohang
5 Changgigap
6 Ulgi
7 Pusan
8 Kaeok-Do
9 Yosu
10 Sori-Do
11 Komun-Do
12 Chejl-Do
13 Sanji
14 Mara-Do
15 Chuk-Do
16 Huksan-Do
17 Hong-Do
18 Mokpo
19 Kunsan
20 Ochoung-Do
21 Kyongyolbi-Do
22 Pu-Do
23 Inchon

연안정지 해양관측점 위치표
Position of the Shore Stations.

해역 Region	번호 No.	관측지명 Name of Station	위치 Location 북위 Lat. (N)	동경 Long. (E)	관측회수 Frequency of observations	관측개시년 Date of Inauguration
동해안 East Coast	①	주문진 Chumunjin	37°—53′	128°—50′	매일 Daily*	1952. 8
	②	울릉도 Ulneung-Do	37°—29′	130°—55′	매일 Daily*	1931. 11
	③	죽변만 Chukbyonman	37°—03′	129°—26′	매일 Daily*	1916. 7
	④	포항 Pohang	36°—03′	129°—26′	매일 Daily*	1946. 7
	⑤	장기갑 Changgigap	36°—05′	129°—35′	매일 Daily*	1916. 7
	⑥	울기 Ulgi	35°—29′	129°—27′	매일 Daily*	1939. 1
남해안 South Coast	⑦	부산 Pusan	35°—05′	129°—02′	매일 Daily*	1925. 3
	⑧	가덕도 Kadok-Do	34°—59′	128°—50′	매일 Daily*	1930. 1
	⑨	여수 Yosu	34°—44′	128°—44′	매일 Daily*	1921. 1
	⑩	소리도 Sori-Do	34°—24′	127°—48′	매일 Daily*	1928. 4
	⑪	거문도 Komun-Do	34°—01′	127°—19′	매일 Daily*	1916. 7
	⑫	자지도 Chaji-Do	34°—05′	126°—36′	매일 Daily*	1928. 4
	⑬	산지 Sanji	33°—31′	126°—33′	매일 Daily*	1923. 10
	⑭	마라도 Mara-Do	33°—07′	126°—16′	매일 Daily*	1923. 10
서해안 West Coast	⑮	죽도 Chuk-Do	34°—14′	125°—51′	매일 Daily*	1916. 7
	⑯	흑산도 Huksan-Do	34°—06′	125°—06′	매일 Daily*	1925. 10
	⑰	홍도 Hong-Do	34°—43′	125°—13′	매일 Daily*	1933. 1
	⑱	목포 Mokpo	34°—47′	126°—23′	매일 Daily*	1928. 8
	⑲	군산 Kunsan	35°—59′	126°—43′	매일 Daily*	1939. 4
	⑳	어청도 Ochong-Do	36°—07′	125°—59′	매일 Daily*	1916. 7
	㉑	격렬비도 Kyognyolbi-Do	36°—37′	125°—33′	매일 Daily*	1916. 7
	㉒	부도 Pu-Do	37°—09′	126°—21′	매일 Daily*	1926. 1
	㉓	인천 Inchon	37°—28′	126°—36′	매일 Daily*	1938. 1

* 매일 오전 10시 관측
At. 10 a. m. everywhere.

1. 연 안 정 지 월
Surface Water Temperatures

월 Month	순 Ten day \ 관측지명 Station	① 주문진 Chum-unjin	② 울능도 Ulneu-ng-Do	③ 죽변 Chuk byon	④ 포항 Pohang	⑤ 장기갑 Chang-gigap	⑥ 울기 Ulgi	⑦ 부산 Pusan	⑧ 가덕도 Kadok-Do	⑨ 여수 Yosu	⑩ 소리도 Sori-Do	⑪ 거문도 Komun-Do
1월 Jan.	상순 1st	10.52	10.41	11.79	8.98	3.99	13.36	10.46	10.78	6.37	10.90	12.76
	중순 2nd	8.39	11.36	10.49	7.88	2.98	12.44	10.08	9.62	5.34	10.53	13.03
	하순 3rd	8.64	12.34	9.85	8.67	5.40	12.42	10.41	9.32	5.36	9.96	14.13
	월평균 Mean	**9.18**	**11.37**	**10.71**	**8.51**	**4.12**	**12.74**	**10.32**	**9.91**	**5.69**	**10.46**	**13.31**
2월 Feb.	상순 1st	8.45	12.26	8.67	8.17	7.44	11.13	10.34	9.02	5.62	9.92	12.50
	중순 2nd	7.23	12.47	8.67	7.30	7.77	10.90	10.28	8.31	5.94	9.96	12.71
	하순 3rd	7.66	12.73	8.86	9.25	8.81	10.88	—	8.90	6.74	9.96	12.76
	월평균 Mean	**7.78**	**12.48**	**8.73**	**8.02**	**8.04**	**10.97**	—	**8.74**	**6.10**	**9.94**	**12.66**
3월 Mar.	상순 1st	8.06	12.98	8.82	9.47	9.54	10.92	—	9.45	8.41	10 23	12.68
	중순 2nd	8.34	—	10.10	10.40	11.45	11.89	—	9.81	9.67	10.69	12.82
	하순 3rd	9.12	—	10.18	10.55	11.53	11.87	—	11.14	10.97	11.10	12.23
	월평균 Mean	**8.51**	—	**9.47**	**10.14**	**10.84**	**11.56**	—	**10.10**	**9.68**	**10.68**	**12.91**
4월 Apr.	상순 1st	8.25	—	11.77	11.40	12.82	12.39	13.13	11.00	12.50	12.15	12.97
	중순 2nd	9.10	—	13.27	11.70	12.91	12.81	13.50	12.62	13.88	13.04	13.91
	하순 3rd	10.60	—	14.04	13.39	14.66	13.49	14.12	13.13	15.41	13.50	13.40
	월평균 Mean	**9.32**	—	**13.03**	**12.16**	**13.46**	**12.89**	**13.58**	**12.92**	**13.93**	**12.89**	**13.09**
5월 May	상순 1st	11.79	—	13.64	14.51	15.61	13.96	14.94	14.04	16.27	14.17	13.38
	중순 2nd	13.19	—	14.93	15.08	16.62	14.19	15.61	16.26	17.36	14.79	13.65
	하순 3rd	15.16	—	17.49	16.08	16.74	14.73	17.18	17.71	18.74	16.76	14.25
	월평균 Mean	**13.38**	—	**15.35**	**15.49**	**16.32**	**14.33**	**15.93**	**16.00**	**17.46**	**15.24**	**13.76**
6월 Jun.	상순 1st	15.27	—	16.37	16.99	17.29	14.62	—	17.71	19.86	17.43	14.46
	중순 2nd	16.64	—	17.21	18.58	17.21	15.51	—	17.84	20.55	18.67	14.82
	하순 3rd	17.76	—	18.60	18.81	17.20	16.44	—	16.98	21.28	19.13	15.83
	월평균 Mean	**16.56**	—	**17.39**	**18.31**	**17.23**	**15.52**	—	**17.51**	**20.59**	**18.41**	**14.70**

별 표 면 수 온
at the Shore Stations.

⑫ 자지도 Chaji-Do	⑬ 산 지 Sanji	⑭ 마라도 Mara-Do	⑮ 죽 도 Chuk-Do	⑯ 흑산도 Huksan-Do	⑰ 홍 도 Hong-Do	⑱ 목 포 Mokpo	⑲ 군 산 Kunsan	⑳ 어청도 Ochoung-Do	㉑ 격렬비도 Kyoknyol-bi-Do	㉒ 부 도 Pudo	㉓ 인 천 Inchon
11.53	—	15.81	10.83	14.30	10.28	—	1.27	—	8.41	4.88	1.67
10.76	—	14.85	9.34	12.64	8.91	—	-0.37	—	5.41	3.58	0.37
10.40	—	15.24	9.00	12.40	8.31	—	1.50	—	4.26	2.76	1.20
10.89	—	**15.30**	**9.72**	**13.11**	**9.07**	—	**0.90**	—	**6.03**	**3.41**	**1.08**
9.80	—	14.12	10.46	12.53	7.86	5.51	1.87	5.63	4.13	2.57	0.92
9.94	—	13.43	10.44	12.60	8.00	5.96	2.35	5.17	4.14	2.09	1.54
10.35	—	13.60	9.64	12.70	8.00	6.45	3.78	5.10	4.40	2.24	2.81
10.03	—	**13.72**	**10.18**	**12.61**	**7.95**	**5.97**	**2.66**	**4.90**	**4.22**	**2.30**	**1.76**
11.45	—	13.40	—	11.35	8.21	7.57	6.01	5.02	4.77	3.05	4.08
11.34	—	13.78	—	10.78	8.30	8.26	6.72	5.38	6.09	4.17	5.39
11.71	—	13.33	—	9.68	8.60	9.94	9.00	5.80	6.93	5.20	6.66
11.50	—	**13.84**	—	**10.27**	**8.37**	**8.59**	**7.24**	**5.40**	**5.93**	**4.14**	**5.38**
12.21	—	13.34	9.60	—	8.76	11.81	11.04	6.40	7.08	6.60	8.41
13.07	—	14.12	9.75	—	9.22	13.00	12.83	7.94	7.40	7.38	9.65
14.31	—	14.87	11.43	—	9.89	14.70	16.05	8.72	7.93	8.35	11.12
13.17	—	**14.11**	**10.26**	—	**9.29**	**13.17**	**13.27**	**7.69**	**7.49**	**7.44**	**9.73**
14.70	17.22	16.71	12.23	—	10.77	15.17	16.31	9.66	8.92	9.85	12.29
15.97	17.33	17.55	14.25	—	—	17.20	19.32	11.00	9.62	11.75	14.91
18.52	—	17.60	14.45	—	—	18.23	20.61	12.18	11.45	13.05	17.14
16.39	—	**17.20**	**13.64**	—	—	**16.87**	**18.75**	**10.94**	**9.99**	**11.55**	**14.78**
17.12	—	18.47	15.44	16.36	14.63	20.07	22.15	13.48	12.58	14.30	18.84
19.33	—	19.93	15.95	17.25	16.81	21.01	23.33	14.54	15.16	15.85	19.75
19.57	—	21.18	18.78	18.18	18.54	21.55	25.28	15.98	17.68	17.70	21.76
18.94	—	**19.86**	**16.78**	**17.26**	**16.66**	**20.87**	**23.59**	**14.66**	**15.14**	**15.95**	**20.12**

연 안 정 지 월
Surface Water Temperatures

월 Month	관측지명 Station / 순 Ten day	① 주문진 Chum-unjin	② 울릉도 Ulneu-ng-Do	③ 죽변 Chuk byon	④ 포항 Pohang	⑤ 장기갑 Chang-gigap	⑥ 울기 Ulgi	⑦ 부산 Punsan	⑧ 가덕도 Kadok-Do	⑨ 여수 Yosu	⑩ 소리도 Sori-Do	⑪ 거문도 Komun-Do
7월 Jul.	상순 1st	17.43	20.92	19.26	17.61	17.43	17.42	20.35	21.61	22.21	20.68	19.46
	중순 2nd	21.70	18.64	19.89	17.91	20.15	15.95	22.34	24.13	23.53	22.99	21.82
	하순 3rd	21.76	19.19	18.49	18.65	24.33	17.55	25.50	24.25	24.48	23.54	23.36
	월평균 Mean	**20.28**	**19.58**	**19.21**	**18.06**	**20.97**	**16.97**	**22.73**	**23.33**	**23.41**	**20.40**	**21.55**
8월 Aug.	상순 1st	21.87	23.20	18.68	18.84	23.48	19.17	24.78	23.25	25.05	23.56	25.64
	중순 2nd	22.66	24.85	19.85	18.20	23.31	19.06	23.15	23.22	25.36	24.07	24.91
	하순 3rd	23.96	25.48	25.31	25.48	25.27	24.56	25.54	24.89	25.35	24.59	26.03
	월평균 Mean	**22.83**	**24.51**	**21.26**	**20.84**	**24.02**	**20.93**	**24.49**	**23.79**	**25.24**	**24.07**	**25.53**
9월 Sep.	상순 1st	23.57	25.20	23.07	25.12	24.48	23.62	25.46	24.29	25.33	24.52	24.86
	중순 2nd	22.88	—	22.99	24.21	24.18	22.70	24.03	25.35	24.11	23.95	23.75
	하순 3rd	22.23	—	22.02	22.62	23.43	23.22	23.20	24.59	23.59	23.66	23.90
	월평균 Mean	**22.89**	—	**22.69**	**23.98**	**24.03**	**23.18**	**24.23**	**24.74**	**24.34**	**24.04**	**24.17**
10월 Oct.	상순 1st	20.26	—	21.47	21.46	22.30	22.52	22.10	21.65	23.14	21.83	22.99
	중순 2nd	19.46	—	20.72	21.10	21.07	21.55	21.82	21.41	22.08	20.26	22.92
	하순 3rd	18.64	—	19.77	21.10	19.67	20.79	19.74	20.53	20.57	19.46	20.52
	월평균 Mean	**19.46**	—	**20.65**	**20.91**	**21.01**	**21.62**	**21.22**	**21.19**	**21.93**	**20.52**	**22.14**
11월 Nov.	상순 1st	17.63	19.37	—	18.14	17.63	18.89	18.81	18.39	18.80	19.17	18.09
	중순 2nd	16.32	20.91	—	16.64	15.87	18.36	17.71	18.37	16.52	17.56	16.65
	하순 3rd	14.97	—	—	15.03	14.11	16.86	16.37	18.10	14.86	16.10	15.12
	월평균 Mean	**16.31**	—	—	**16.60**	**15.87**	**18.04**	**17.63**	**18.28**	**16.73**	**17.61**	**16.62**
12월 Dec.	상순 1st	13.19	—	—	—	13.67	15.92	15.35	17.08	13.70	14.61	14.56
	중순 2nd	12.23	—	—	—	10.21	14.61	14.28	16.98	11.94	14.56	14.82
	하순 3rd	11.53	—	—	—	8.37	14.22	12.52	13.46	9.35	14.53	13.87
	월평균 Mean	**12.32**	—	—	—	**10.75**	**14.92**	**14.05**	**15.84**	**11.66**	**14.56**	**14.42**
년 Year	평균 Mean	14.90	—	—	—	15.55	16.14	16.95	16.03	16.39	16.57	17.07

별 표 면 수 온
at the Shore Stations.

⑫ 자지도 Chaji-Do	⑬ 산 지 Sanji	⑭ 마라도 Mara-Do	⑮ 죽 도 Chuk-Do	⑯ 흑산도 Huksan-Do	⑰ 홍 도 Hong-Do	⑱ 목 포 Mokpo	⑲ 군 산 Kunsan	⑳ 어청도 Ochoung-Do	㉑ 격렬비도 Kyoknyo!-bi-Do	㉒ 부 도 Pu-Do	㉓ 인 천 Inchon
21.20	23.37	22.13	19.36	21.22	20.70	23.68	26.04	17.24	20.22	18.45	22.63
21.68	20.45	25.41	20.14	25.26	22.96	25.46	26.86	17.72	23.04	19.26	23.63
22.12	—	28.10	22.00	26.97	24.53	26.69	29.06	19.98	25.83	21.45	25.69
21.66	—	**25.21**	**20.14**	**24.49**	**22.76**	**25.28**	**27.32**	**18.31**	**23.03**	**19.72**	**23.98**
21.11	—	27.96	20.87	27.29	24.86	26.85	28.64	23.18	26.82	23.18	26.61
19.17	25.52	27.74	19.85	24.99	25.08	27.38	28.34	24.74	27.12	24.70	27.03
21.91	—	27.51	19.22	26.23	25.34	27.23	29.77	25.58	25.43	25.57	27.27
20.73	—	**27.74**	**19.98**	**26.17**	**25.09**	**27.15**	**28.58**	**24.50**	**26.46**	**24.48**	**26.97**
20.53	25.51	28.83	20.55	25.83	25.08	26.45	27.16	25.81	25.06	25.30	25.25
23.01	25.22	25.44	19.75	27.56	23.47	24.24	24.66	24.42	23.75	23.65	23.65
23.00	21.75	23.99	19.70	24.30	19.93	22.90	21.79	23.58	20.78	22.88	22.45
22.18	**24.16**	**26.09**	**19.83**	**25.89**	**22.83**	**24.53**	**24.53**	**24.60**	**23.19**	**23.94**	**23.78**
22.39	—	23.73	21.03	22.66	22.10	22.55	20.01	21.90	19.97	—	21.11
21.12	—	23.92	18.53	21.72	19.03	20.69	18.47	18.98	18.91	—	18.97
19.36	20.18	21.43	15.63	21.25	17.05	19.26	17.10	17.72	18.29	—	18.92
20.96	—	**23.03**	**18.39**	**21.88**	**18.73**	**20.83**	**18.26**	**19.50**	**18.72**	—	**19.67**
18.09	18.72	19.20	16.65	19.47	16.35	16.86	14.34	16.99	16.16	—	14.91
16.91	18.28	21.03	15.45	16.71	15.63	14.93	12.69	15.66	15.15	—	13.33
16.00	—	18.85	15.70	15.10	14.68	13.09	10.60	15.19	13.93	—	11.98
17.03	—	**19.69**	**15.93**	**17.11**	**15.55**	**14.96**	**12.54**	**15.16**	**15.23**	—	**13.41**
13.59	—	17.57	—	—	13.62	12.14	8.00	13.74	12.98	11.75	8.96
12.54	—	17.80	—	—	13.15	10.74	6.12	11.98	11.98	10.60	7.12
11.64	—	13.36	—	—	11.91	7.57	2.61	—	10.46	9.00	5.01
12.59	—	**16.24**	—	—	**12.89**	**10.15**	**5.58**	—	**11.81**	**10.45**	**7.03**
16.34	—	**19.34**	—	—	**15.08**	**16.14**	**15.27**	—	**14.22**	—	**13.97**

2. 연안정지 월별 표면수비중
Surface Water Density at the Shore Stations.

월 Month	순 Ten day		주문진 Chumunjin	부산 Pusan	인천 Inchon
1월 Jan.	상순	1st	25.52	26.33	24.36
	중순	2nd	25.48	26.30	23.99
	하순	3rd	25.49	26.37	24.15
	월평균	Mean	**25.50**	**26.33**	**24.17**
2월 Feb.	상순	1st	25.31	26.12	24.03
	중순	2nd	25.40	26.04	23.94
	하순	3rd	25.35	25.03	24.12
	월평균	Mean	**25.35**	**25.73**	**24.03**
3월 Mar.	상순	1st	24.95	—	24.07
	중순	2nd	25.12	—	23.85
	하순	3rd	25.52	—	23.89
	월평균	Mean	**25.11**	—	**23.94**
4월 Apr.	상순	1st	24.85	25.53	23.33
	중순	2nd	24.93	25.16	23.31
	하순	3rd	25.33	25.20	23.69
	월평균	Mean	**25.04**	**25.29**	**23.44**
5월 May	상순	1st	25.27	25.09	23.53
	중순	2nd	25.30	24.94	24.35
	하순	3rd	25.35	25.56	23.93
	월평균	Mean	**25.31**	**25.19**	**23.94**
6월 Jun.	상순	1st	25.16	—	23.80
	중순	2nd	25.12	—	23.82
	하순	3rd	25.19	—	24.24
	월평균	Mean	**25.16**	—	**23.95**

월 Month	순 Ten day		주문진 Chumunjin	부산 Pusan	인천 Inchon
7월 Jul.	상순	1st	—	21.15	23.19
	중순	2nd	—	22.00	24.74
	하순	3rd	—	22.57	26.54
	월평균	Mean	—	**21.91**	**24.88**
8월 Aug.	상순	1st	25.10	21.98	22.31
	중순	2nd	24.54	21.57	21.45
	하순	3rd	23.09	22.65	20.13
	월평균	Mean	**24.24**	**22.07**	**21.29**
9월 Sep.	순	1st	23.44	22.73	23.20
	중순	2nd	23.86	22.61	19.29
	하순	3rd	24.00	22.46	21.24
	월평균	Mean	**23.77**	**22.60**	**21.24**
10월 Oct.	상순	1st	24.18	23.53	22.75
	중순	2nd	24.13	23.04	22.42
	하순	3rd	23.76	23.93	23.27
	월평균	Mean	**24.02**	**23.50**	**22.81**
11월 Nov.	상순	1st	23.99	24.65	—
	중순	2nd	23.71	25.17	—
	하순	3rd	24.89	24.88	—
	월평균	Mean	**24.03**	**24.90**	—
12월 Dec.	상순	1st	24.46	25.09	—
	중순	2nd	25.01	25.75	—
	하순	3rd	25.24	25.29	—
	월평균	Mean	**24.99**	**25.38**	—

제 2 편

횡단정선 해양관측성적

PART 2

SECTIONAL OCEANOGRAPHIC OBSERVATIONS

1961

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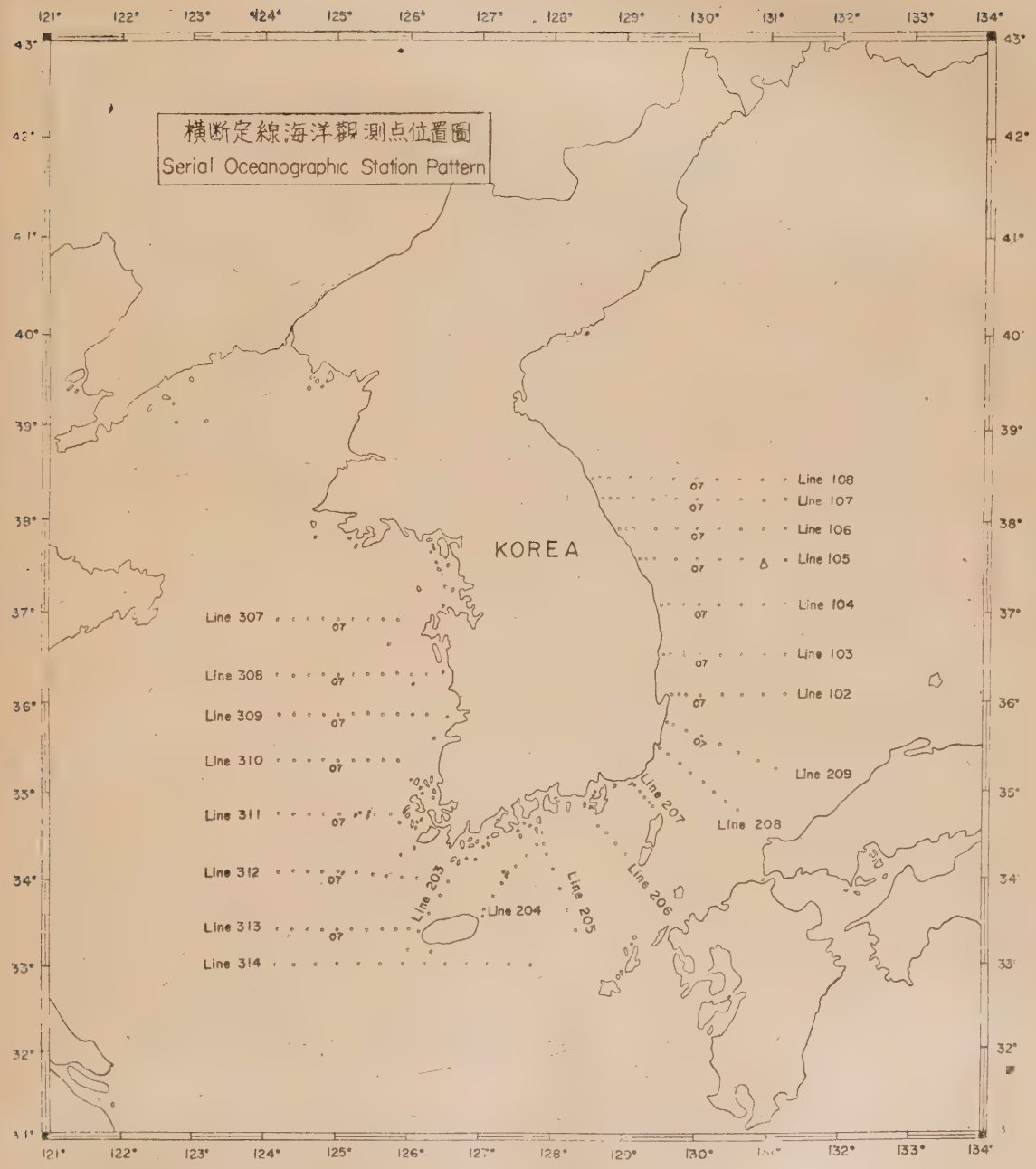
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횡단정선 해양관측점 위치표

Position of the Serial Oceanographic Stations.

Line	Sta. No / Position	01	02	03	04	05	06	07	08	09	10	11
107	Lat. (N)	38°13′	38°13′	38°13′	38°13′	38°13′	38°13′	38°13′	38°13′	38°13′	38°13′	38°13′
	Long. (E)	128°39′	128°43′	128°51′	129°04′	129°23′	129°41′	130°00′	130°19′	130°38′	130°56′	131°16′
106	Lat. (N)		37°54′	37°54′	37°54′	37°54′	37°54′	37°54′	37°54′	37°54′	37°54′	37°54′
	Long. (E)		128°52′	128°57′	129°04′	129°22′	129°41′	130°00′	130°19′	130°38′	130°56′	131°15′
105	Lat. (N)			37°33′	37°33′	37°33′	37°33′	37°33′	37°33′	37°33′	37°33′	37°33′
	Long. (E)			129°10′	129°15′	129°22′	129°41′	130°00′	130°19′	130°37′	130°56′	131°16′
104	Lat. (N)				37°03′	37°03′	37°03′	37°03′	37°03′	37°03′	37°03′	37°03′
	Long. (E)				129°29′	129°34′	129°47′	130°00′	130°19′	130°37′	130°55′	131°14′
103	Lat. (N)				36°30′	36°30′	36°30′	36°30′	36°30′	36°30′	36°30′	36°30′
	Long. (E)				129°30′	129°35′	129°48′	130°00′	130°19′	130°37′	130°55′	131°14′
102	Lat. (N)				36°05′	36°05′	36°05′	36°05′	36°05′	36°05′	36°05′	36°05′
	Long. (E)				129°37′	129°42′	129°48′	130°00′	130°19′	130°37′	130°55′	131°14′
209	Lat. (N)				35°47′	35°45′	35°41′	35°37′	35°31′	35°24′	35°18′	
	Long. (E)				129°33′	129°39′	129°50′	130°01′	130°17′	130°34′	130°51′	
208	Lat. (N)	35°28′	35°24′	35°18′	35°11′	35°05′	34°58′	34°52′	34°46′			
	Long. (E)	129°27′	129°33′	129°44′	129°13′	130°02′	130°12′	130°21′	130°31′			
207	Lat. (N)	35°01′	34°58′	34°54′	34°50′	34°46′						
	Long. (E)	129°07′	129°11′	129°15′	129°20′	129°24′						
206	Lat. (N)	34°35′	34°30′	34°23′	34°15′	34°08′						
	Long. (E)	128°38′	128°41′	128°50′	128°58′	129°06′						
205	Lat. (N)	34°23′	34°15′	34°06′	33°52′	33°38′						
	Long. (E)	127°49′	127°53′	127°57′	128°03′	128°09′						
204	Lat. (N)	34°21′	34°14′	34°07′	33°54′	33°45′	33°36′	33°21′	33°11′			
	Long. (E)	127°44′	127°36′	127°27′	127°15′	127°09′	127°03′	126°58′	126°58′			
203	Lat. (N)	33°59′	33°49′	33°36′	33°23′	33°10′						
	Long. (E)	126°31′	126°25′	126°16′	126°07′	125°58′						
314	Lat. (N)	33°00′	33°00′	33°00′	33°00′	33°00′	33°00′	33°00′	33°00′	33°00′	33°00′	
	Long. (E)	127°41′	127°23′	127°05′	126°48′	126°30′	126°12′	125°54′	125°36′	125°18′	125°00′	
313	Lat. (N)		33°24′	33°24′	33°24′	33°24′	33°24′	33°24′	33°24′	33°24′	33°24′	33°24′
	Long. (E)		130°00′	125°48′	125°36′	125°24′	125°12′	125°00′	124°48′	124°36′	124°24′	124°12′
312	Lat. (N)		33°59′	34°00′	34°02′	34°03′	34°05′	34°06′	34°06′	34°06′	34°06′	34°06′
	Long. (E)		126°06′	125°54′	125°42′	125°30′	125°18′	125°00′	124°48′	124°36′	124°23′	124°11′
311	Lat. (N)				34°43′	34°43′	34°43′	34°43′	34°43′	34°43′	34°43′	34°43′
	Long. (E)				125°43′	125°31′	125°19′	125°00′	124°48′	124°36′	124°23′	124°11′
310	Lat. (N)			35°20′	32°20′	32°20′	32°20′	32°20′	32°20′	32°20′	32°20′	32°20′
	Long. (E)			125°48′	125°36′	125°24′	125°12′	125°00′	124°48′	124°35′	124°24′	124°12′
309	Lat. (N)	35°51′	35°51′	35°51′	35°51′	35°51′	35°51′	35°51′	35°51′	35°51′	35°51′	35°51′
	Long. (E)	126°14′	126°01′	125°49′	125°37′	125°25′	125°12′	125°00′	124°48′	124°36′	124°23′	124°11′
308	Lat. (N)	36°19′	36°19′	36°19′	36°19′	36°19′	36°19′	36°19′	36°19′	36°19′	36°19′	36°19′
	Long. (E)	126°13′	126°02′	125°50′	125°37′	125°25′	125°13′	125°00′	124°48′	124°35′	124°23′	124°11′
307	Lat. (N)			36°57′	36°56′	36°56′	36°56′	36°56′	36°56′	36°56′		
	Long. (E)			126°00′	125°38′	125°25′	125°12′	125°00′	124°47′	125°35′		

동 해 해 양 조 사 성 적

OCEANOGRAPHIC OBSERVATIONS

EASTERN WATERS

1 9 6 1

A 107선 해양관측성적

Oceanographic Data, Line 107

Date		① July 31~August 1, 1961								
Station Number		02	03	04	05	06	07	08	09	10
Day		31	31	31	31	31	31	31	1	1
Item	Time / Z(m)	0900	1040	1240	1500	1730	1955	2220	0055	0325
T °C	0	26.30	26.30	26.30	24.20	23.30	24.10	24.20	24.60	25.00
	10	16.72	19.85	19.80	20.50	19.93	20.70	16.75	20.30	24.60
	25	8.72	9.42	11.75	15.72	18.03	16.92	16.30	17.25	17.20
	50	4.30	5.20	5.72	11.40	15.60	15.53	15.00	11.13	7.30
	100	2.30	2.05	3.02	4.55	11.40	13.10	9.20	5.30	3.20
	150	1.52	1.02	1.23	1.91	6.32	5.62	3.72	2.40	1.45
	200	0.90	0.72	0.80	0.95	2.52	2.30	2.30	1.30	1.20
	300	0.70	0.65	0.63	0.60	1.01	0.90	1.10	0.63	0.50
	Botm.	—	—	—	—	—	—	—	—	—
S ‰	0	33.87	33.86	33.77	33.21	33.22	33.30	33.03	33.26	33.96
	10	33.95	33.75	33.77	33.68	33.57	33.62	33.12	33.31	33.78
	25	33.95	33.91	33.87	34.09	34.27	34.20	33.87	34.02	34.11
	50	33.91	33.89	33.91	34.24	34.25	34.36	34.29	34.20	34.00
	100	33.80	33.80	33.78	33.89	34.29	34.34	34.11	33.87	33.93
	150	33.86	33.89	33.84	33.87	33.95	33.93	33.89	33.86	33.82
	200	33.86	33.87	33.93	33.86	33.91	33.98	33.83	33.93	33.82
	300	33.86	33.86	33.86	33.86	33.84	33.93	33.78	33.89	33.91
	Botm.	—	—	—	—	—	—	—	—	—
Sounding (m)		—	—	—	—	—	—	—	—	—
Transp. (m)		17.0	16.0	20.0	18.0	15.0	—	—	—	—
Color		3	3	2	3	3	—	—	—	—
Wave		0	1	1	1	2	—	—	—	—
Swell		0	1	1	1	1	1	1	1	1
Air Temp. (°C)		26.3	25.5	27.3	25.8	24.7	24.5	24.7	25.5	25.5
Air Press. (mm)		761.5	761.0	760.0	760.0	759.0	759.0	759.5	759.0	758.0
Wind		NW. 1	E/S. 2	E/S. 1	NE. 2	NE. 2	NE. 2	NE. 2	NE. 3	NE. 2
Cloud		Cc. 4	Cb. 7	Ac. 4	Cb. 3	Sc. 4	—	—	—	—
Weather		BC	BC	BC	BC	BC	—	—	—	—

Date		② August 1961							
Station Number		02	03	04	05	06	07	08	09
Day		29	29	29	29	29	29	29	30
Item	Time / Z(m)	0610	0855	1050	1330	1630	1905	2151	0100
T °C	0	23.60	24.20	24.60	24.30	27.20	26.80	24.80	26.70
	10	22.34	20.80	20.45	23.54	26.92	26.20	24.50	26.23
	25	13.85	13.20	12.60	12.40	21.85	21.80	22.00	21.30
	50	6.25	4.73	5.85	6.12	17.20	17.85	17.82	16.10
	100	2.42	1.32	2.40	2.53	9.95	14.35	12.74	11.54
	150	1.20	0.70	1.28	1.54	2.55	9.85	9.63	6.70
	200	0.60	0.60	0.93	1.13	1.75	6.45	8.85	3.00
	300	0.53	0.55	0.83	0.70	1.03	1.45	3.83	0.90
	Botm.	—	—	—	—	—	—	—	—
S ‰	0	28.87	33.21	33.48	31.51	31.24	31.42	31.96	31.67
	10	31.31	33.64	33.73	33.08	31.26	31.42	31.02	31.78
	25	33.48	34.18	34.18	34.27	33.30	33.48	33.30	33.53
	50	33.82	33.89	34.27	34.09	34.45	34.63	34.52	34.27
	100	34.00	34.04	34.09	34.16	34.45	34.52	34.49	34.52
	150	34.02	34.09	34.09	34.09	34.07	33.59	34.45	34.27
	200	34.09	34.09	34.15	34.09	34.09	34.25	34.43	34.16
	300	34.09	34.13	34.09	34.09	34.13	34.07	34.27	34.11
	Botm.	—	—	—	—	—	—	—	—
Sounding (m)		—	—	—	—	—	—	—	—
Transp. (m)		6	22	18	16	18	—	—	—
Color		5	3	3	3	2	—	—	—
Wave		1	1	1	2	3	4	—	—
Swell		1	1	1	1	1	1	1	1
Air Temp. (°C)		22.3	22.5	25.3	26.7	25.3	24.5	24.3	26.2
Air Press. (mm)		763.0	763.0	763	762.5	762	762.5	762.5	762
Wind		—	NW. 1	SW. 1	SE. 2	SE. 3	SE. 4	SE. 4	SE. 4
Cloud		Sc. 4	Cc. 3	Cb. 7	Cb. 7	Sc. 9	Sc. 8	10	10
Weather		BC	BC	BC	BC	C	C	R	C

	③ September 1961						
10	02	03	04	05	06	07	08
30	23	23	23	23	23	23	23
0330	0910	1105	1300	1530	1800	2150	2310
26.40	22.60	22.80	23.30	23.50	24.80	24.40	23.80
23.53	21.63	21.90	22.21	23.45	23.85	23.60	23.44
21.10	15.30	15.01	16.82	23.37	20.83	20.65	20.46
14.85	7.85	8.52	7.43	13.60	17.56	18.70	17.68
6.25	1.52	1.80	1.30	11.50	11.35	15.32	14.42
2.50	0.63	0.95	0.90	1.05	4.85	10.90	10.06
1.54	—	0.75	0.66	0.70	3.40	6.73	7.50
0.90	—	0.64	—	0.70	1.15	1.83	—
—	—	—	—	—	—	—	—
31.73	31.82	31.82	31.91	31.91	32.97	34.05	32.36
33.73	31.78	31.89	31.91	32.79	34.18	34.07	32.38
33.89	31.91	33.96	33.22	33.08	34.02	33.96	33.91
34.45	34.11	34.18	33.95	33.37	34.20	34.40	34.20
34.36	33.98	34.00	33.95	33.86	34.29	34.85	34.47
34.16	34.00	33.95	33.95	33.91	34.11	34.38	34.29
34.09	—	33.86	33.95	33.95	34.07	34.20	34.38
34.15	—	34.05	34.02	34.00	33.96	33.96	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	16	16	16.5	17.5	—	—	—
—	4	4	3	3	3	3	3
—	1	3	3	3	4	4	4
1	1	1	1	1	1	2	3
25.0	22.3	23.7	24.0	24.7	25.3	24.6	23.7
761.5	761.5	760.0	760.0	759.5	759.5	759.5	761.0
SE. 4	SW. 2	SW. 3	SW. 3	S. 3	SW. 4	SW. 5	NW. 7
10	Sc. 9	Cc. 7	Cb. 7	Cc. 7	Cc. 6	Cs. 6	Cs. 10
C	C	BC	BC	BC	BC	BC	C

Date		④ November 1961								
Station Number		02	03	04	05	06	07	08	09	10
Day		5	5	5	5	5	5	5	6	6
Item	Time / Z(m)	0950	1130	1320	1530	1755	2020	2245	0110	0325
T °C	0	19.30	20.10	20.30	19.10	19.90	20.00	19.20	19.20	20.30
	10	18.82	19.90	20.08	18.80	19.70	19.70	18.92	18.50	20.12
	25	18.50	19.48	19.57	18.40	19.60	19.15	18.60	17.98	20.04
	50	15.45	19.30	19.00	18.25	19.13	19.00	18.50	17.89	19.85
	100	2.52	5.32	7.90	14.52	16.65	17.30	16.57	16.97	17.00
	150	0.92	1.20	0.95	3.96	6.95	13.12	12.28	10.48	11.92
	200	0.80	0.65	0.78	1.25	2.40	4.86	7.78	8.53	7.60
	300	0.63	0.60	0.78	0.90	1.00	1.36	1.03	1.90	1.80
	Botm.	—	—	—	—	—	—	—	—	—
S ‰	0	33.49	33.84	33.77	33.62	33.68	33.69	33.48	33.49	33.77
	10	33.42	33.89	33.91	33.53	33.69	33.77	33.49	33.42	33.77
	25	33.42	33.78	33.91	33.51	33.64	33 68	33.42	33.49	33.77
	50	33.84	33.69	33.77	33.57	33.58	33.60	33.42	33.60	33.35
	100	34.11	34.20	34.27	34.56	34.51	34.51	34.47	34.49	34.24
	150	34.04	34.09	34.04	34.25	34.29	34.47	34.56	34 49	34.24
	200	34.04	34.04	34.04	34.11	34.11	34.20	34.33	34.38	34.02
	300	34.11	34.11	34.09	34.11	34.11	34.11	34.11	34.11	33.84
	Botm.	—	—	—	—	—	—	—	—	—
Sounding (m)		—	—	—	—	—	—	—	—	—
Transp. (m)		14	16	18	15	—	—	—	—	—
Color		4	4	3	3	—	—	—	—	—
Wave		3	3	2	2	2	—	—	—	—
Swell		1	2	2	1	1	1	2	2	2
Air Temp. (°C)		10.3	13.6	16.3	16.2	13.3	14.0	13.8	14.0	14.9
Air Press. (mm)		771.0	771.0	769.3	769.5	769.5	769.0	769.5	769.5	769.5
Wind		SW. 3	SW. 3	SE. 2	SE. 2	S. 2	S. 3	S. 4	S. 4	S 4
Cloud		0	St. 1	Nb. 1	Nb. 1	1	—	—	—	—
Weather		B	B	B	B	B	BC	BC	BC	BC

⑤ December 1961					
02	03	04	05	06	07
10	10	10	10	10	10
0810	0950	1220	1410	1635	1853
14.30	14.40	16.10	16.30	16.20	16.80
13.90	14.30	15.80	15.92	16.37	16.60
13.89	14.00	15.48	15.90	15.90	16.53
12.18	12.80	15.17	14.86	15.80	16.50
4.20	3.70	5.51	5.78	15.78	15.70
1.95	1.30	2.32	1.92	9.42	7.58
1.08	0.83	0.79	1.20	3.20	2.63
0.57	0.69	0.70	0.63	1.00	0.88
—	—	—	—	—	—
33.57	33.42	33.69	33.77	33.60	33.84
33.53	33.42	33.78	33.77	33.58	34.16
33.60	33.42	33.66	33.86	33.60	33.71
33.91	33.87	33.58	34.07	33.60	33.82
33.69	33.75	33.82	33.84	33.53	33.91
33.82	33.62	33.68	33.78	34.05	33.95
33.68	33.77	33.64	33.75	33.77	32.54
33.68	33.68	33.80	33.66	33.69	33.68
—	—	—	—	—	—
—	—	—	—	—	—
16.0	15.0	15.0	16.0	13.0	—
3	3	3	3	3	3
4	4	4	4	4	4
1	1	2	2	2	2
10.7	11.5	12.7	12.2	12.9	12.5
767.5	767.5	767	766	766	766
SW. 3	NNW. 4	SW. 4	SW. 3	W. 3	W. 4
Sc. 7	Cc. 7	Cs. 8	Cc. 6	Cb. 4	—
BC	BC	C	BC	BC	BC

B. 106선 해양관측성적

Oceanographic Data, Line 106

Date		① June 1961						
Station Number		02	03	04	05	06	07	08
Day		27	27	27	27	27	27	27
Item	Time / Z(m)	1003	1105	1230	1420	1635	1845	2100
T °C	0	19.30	19.70	19.90	19.40	20.20	20.20	20.00
	10	17.95	18.80	18.12	16.65	18.80	18.80	18.92
	25	8.03	9.92	11.45	15.05	16.15	15.43	15.25
	50	—	4.52	6.23	12.62	14.72	11.60	15.10
	100	—	2.20	2.92	3.80	9.95	9.45	9.45
	150	—	1.52	1.02	2.30	7.20	9.20	9.25
	200	—	1.00	0.75	1.12	3.75	8.45	8.80
	300	—	0.65	0.67	0.85	1.02	5.85	6.35
	Botm.	1.92	—	—	—	—	—	—
S ‰	0	33.86	33.86	33.86	33.93	33.93	34.47	34.29
	10	33.86	33.91	33.82	33.93	34.02	34.29	34.29
	25	33.87	33.96	34.00	34.31	34.13	34.31	34.43
	50	—	33.82	33.96	34.31	34.29	34.29	34.42
	100	—	33.84	33.86	33.86	34.20	34.40	34.52
	150	—	33.86	33.82	33.86	34.05	34.33	34.34
	200	—	33.84	33.86	33.86	34.02	34.29	34.34
	300	—	33.86	33.86	33.86	34.11	34.29	34.16
	Botm.	—	—	—	—	—	—	—
Sounding (m)		40	—	—	—	—	—	—
Transp. (m)		16.0	15.5	17.0	17.0	3	—	—
Color		2	2	3	3	3	—	—
Wave		1	1	2	1	2	2	2
Swell		1	1	1	1	1	1	1
Air Temp. (°C)		26.0	21.5	23.5	23.5	22.5	20.7	20.0
Air Press. (mm)		761.0	761.5	761.0	761.0	760.5	761.0	761.0
Wind		E. 1	N/E. 2	NE. 2	NE. 2	NE. 1	NE. 2	NE. 2
Cloud		Sc. 7	Cb. 3	Cc. 6	Cb. 3	Cb. 3	Sc. 6	—
Weather		BC	BC	BC	BC	BC	BC	—

② August 1961

02	03	04	05	06	07	08	09	10
2	1	1	1	1	1	1	1	1
0010	2150	1940	1800	1540	1330	1100	0840	0505
24.70	22.60	24.30	25.20	25.70	26.10	25.00	24.20	25.30
17.70	17.70	16.23	22.65	22.44	22.55	18.40	21.35	23.70
12.05	15.15	14.70	19.20	18.50	15.80	16.50	17.83	16.95
—	8.85	15.35	15.90	10.85	10.50	14.33	15.40	12.23
—	3.44	8.55	11.74	9.90	9.70	9.54	10.30	4.23
—	1.35	3.70	8.53	9.45	9.40	9.65	3.45	1.40
—	0.65	2.05	5.55	9.35	9.34	7.65	1.60	0.90
—	0.60	0.90	1.73	6.43	6.30	1.35	0.90	0.65
3.15	—	—	—	—	—	—	—	—
33.80	33.77	32.47	32.12	33.86	33.68	33.33	33.08	33.84
33.80	33.77	33.50	33.77	33.48	33.68	33.50	33.17	33.86
34.00	34.00	34.11	33.77	34.11	34.29	33.93	33.86	34.09
—	33.91	34.25	34.20	34.16	34.11	34.20	34.36	34.11
—	33.78	34.18	34.33	34.09	34.09	34.22	34.24	33.86
—	33.60	33.86	34.11	34.11	34.11	34.11	33.93	33.93
—	33.75	33.86	34.02	34.11	34.09	34.04	33.86	33.86
—	33.84	33.87	33.86	33.93	33.95	33.91	33.87	33.78
—	—	—	—	—	—	—	—	—
40	—	—	—	—	—	—	—	—
—	—	—	19.0	19.0	21.0	25.0	19.0	21.0
—	—	—	3	3	3	3	3	2
—	—	—	2	3	2	2	2	2
1	1	1	1	1	1	1	1	1
24.0	23.5	24.5	27.0	27.3	27.0	28.0	26.3	26.0
758.0	758.0	758.0	758.0	757.5	757.0	757.5	758.0	758.0
W. 1	NW. 1	NW. 1	NW. 2	N. 3	N. 2	NE. 2	NE. 2	NE. 2
—	—	—	Cb. 7	Cb. 5	Sc. 3	Cb. 4	Cb. 7	Cb. 4
BC	BC	BC	BC	BC	BC	BC	BC	BC

Date		③ September 1961							
Station Number		02	03	04	05	06	07	08	09
Day		25	25	25	25	25	25	25	26
Item	Time / Z(m)	0955	1100	1240	1430	1650	1920	2200	0030
T °C	0	22.70	22.80	24.20	24.20	24.20	23.80	23.70	23.70
	10	21.52	21.65	23.50	23.57	23.43	23.14	22.40	22.92
	25	16.75	14.20	22.94	23.39	23.40	22.33	22.32	22.60
	50	—	8.22	15.48	17.90	19.90	18.51	18.50	17.57
	100	—	4.40	4.62	9.31	16.40	13.90	12.94	10.83
	150	—	0.98	1.79	3.13	06.16	7.58	9.63	9.60
	200	—	0.53	0.95	1.10	1.97	5.22	9.06	9.40
	300	—	0.36	0.40	0.55	0.92	1.23	4.88	8.65
	Botm.	1.75	—	—	—	—	—	—	—
S ‰	0	32.45	32.36	32.39	32.47	32.52	32.29	32.27	32.41
	10	32.21	32.36	32.45	32.50	32.50	32.29	32.32	32.43
	25	33.84	32.66	32.61	32.76	32.92	33.73	32.63	32.45
	50	—	34.22	34.27	34.22	34.22	34.20	34.29	34.21
	100	—	33.98	34.20	34.27	34.47	34.40	34.38	34.36
	150	—	33.95	33.98	34.02	34.11	34.20	34.29	34.25
	200	—	34.00	33.96	34.00	33.96	34.11	34.38	34.20
	300	—	34.15	34.02	33.95	33.95	34.02	34.27	34.29
	Botm.	33.96	—	—	—	—	—	—	—
Sounding (m)		40	—	—	—	—	—	—	—
Transp. (m)		16	16	22	22	23	—	—	—
Color		3	3	2	2	2	—	—	—
Wave		1	1	1	1	1	—	—	—
Swell		1	1	1	1	1	—	—	—
Air Temp. (°C)		21.7	23.0	22.7	22.5	21.0	21.0	20.5	20.0
Air Press. (mm)		763.5	763.5	763.0	761.5	761.5	761.0	762.5	762.0
Wind		SW. 2	NW. 1	N. 1	NE. 1	NNW. 1	S. 3	S. 3	S. 2
Cloud		Cc. 10	Sc. 10	Cc. 10	Ac. 10	Sc. 10	—	—	—
Weather		C	C	C	C	C	R	C	C

④ August 30~September 2, 1961

10	02	03	04	05	06	07	08	09	10
26	2	31	30	30	30	30	30	30	30
0300	0930	0025	2235	2010	1725	1450	1200	0730	0540
23.50	23.00	24.20	25.60	26.00	27.10	25.70	24.80	25.70	26.70
22.68	22.53	22.10	21.73	25.63	26.60	24.90	24.05	25.30	26.40
22.56	22.20	17.73	20.60	20.30	21.15	22.30	19.65	21.63	26.25
16.83	—	10.60	17.15	19.43	17.15	15.13	13.43	16.40	16.29
10.43	—	3.34	10.04	13.03	14.65	10.26	9.70	10.00	11.56
9.58	—	2.30	2.20	8.85	9.80	9.45	9.50	9.50	6.72
9.42	—	1.20	1.15	1.65	6.50	9.35	9.40	9.45	2.20
8.46	—	1.65	0.80	0.96	1.45	6.15	8.25	8.50	0.92
—	3.55	—	—	—	—	—	—	—	—
32.47	31.55	31.08	30.90	31.29	31.56	31.94	32.05	31.35	33.64
32.47	31.87	31.44	31.91	31.58	31.60	32.63	32.23	31.35	31.87
32.47	32.90	33.12	33.75	34.42	33.06	32.85	34.15	34.04	31.87
34.42	—	33.15	34.52	34.54	34.09	34.52	34.61	34.51	33.64
34.33	—	33.19	34.52	34.52	34.54	34.42	34.42	34.36	34.49
34.33	—	34.09	34.34	34.36	34.52	34.38	33.57	34.34	34.27
34.31	—	34.09	33.96	34.11	34.27	33.48	34.38	34.36	34.09
34.29	—	34.15	34.09	34.09	34.09	34.27	34.31	—	—
—	33.77	—	—	—	—	—	—	—	—
—	40	—	—	—	—	—	—	—	—
—	13	—	—	—	17	19	18	20	—
—	4	—	—	—	3	3	3	3	—
—	1	—	—	—	4	4	3	3	—
—	1	2	2	2	2	2	2	2	—
20.0	22.8	22.5	23.8	24.0	26.5	26.5	26.6	26.7	25.3
761.5	764.0	761.0	761.0	760.5	760.5	761.5	761.0	762.0	762.0
E. 2	NE. 1	NW. 4	NW. 3	NW 4	S. 4	ESE. 4	ESE. 3	ESE. 3	ESE. 3
—	Sc. 2	—	—	—	Sc. 8	Cb. 4	Cu. 8	Sc. 9	Sc. 10
R	B	R	C	C	C	BC	C	C	C

Date		⑤ November 1961								
Station Number		02	03	04	05	06	07	08	09	10
Day		6	6	6	6	6	6	6	6	6
Item	Time / Z(m)	2300	2125	1940	1800	1540	1315	1050	0830	0620
T °C	0	19.40	19.30	19.60	20.00	18.80	18.80	18.40	18.60	18.80
	10	19.10	18.92	19.50	19.80	18.60	18.60	18.20	18.46	18.52
	25	18.53	18.40	19.40	19.62	18.48	18.52	18.15	18.45	18.40
	50	—	14.70	19.20	19.45	18.40	18.50	18.10	18.40	18.35
	100	—	4.70	7.23	12.90	16.10	16.30	16.30	16.30	15.20
	150	—	1.32	1.55	3.92	7.95	8.87	8.87	12.88	9.73
	200	—	0.55	0.90	1.38	2.90	4.23	4.23	9.20	9.45
	300	—	0.50	0.72	0.88	0.97	1.28	1.28	2.90	8.15
	Botm.	0.80	—	—	—	—	—	—	—	—
S ‰	0	33.48	33.31	33.31	33.46	33.13	33.21	33.06	33.13	32.22
	10	34.48	33.31	33.31	33.35	33.13	33.22	33.28	33.13	33.13
	25	33,48	33.27	33.39	33.46	33.17	33.13	33.13	33.13	33.13
	50	—	34.27	33.48	33.48	33.55	33.12	33.13	33.31	33.13
	100	—	34.00	34.02	34.14	34.18	34.18	34.23	34.22	34.25
	150	—	33.84	33.75	33.87	34.07	34.09	34.09	34.27	34.09
	200	—	33.84	33.84	34.02	34.02	33.93	33.87	34.09	34.09
	300	—	33.84	33.84	33.84	33.84	33.93	33.84	33.84	34.09
	Botm.	33.84	—	—	—	—	—	—	—	—
Sounding (m)		40	—	—	—	—	—	—	—	—
Transp. (m)		—	—	—	—	17	19.5	19	13.5	—
Color		—	—	—	—	3	3	3	3	—
Wave		—	—	—	—	2	3	4	3	—
Swell		1	1	1	1	1	2	2	2	—
Air Temp. (°C)		14.0	14.3	15.0	14.5	17.0	16.8	15.5	17.2	14.5
Air Press. (mm)		769.5	769.5	768 0	767.5	768.5	767.5	769.5	767.5	767.5
Wind		W. 3	W. 3	W. 2	W. 1	SW. 2	SW. 2	SW. 2	SW. 3	S. 3
Cloud		—	—	—	—	Ns. 1	Ns. 1	St. 1	Sc. 8	9
Weather		BC	BC	BC	BC	B	B	B	C	C

⑥ December 1961

S_1 37°54′ 128°54′	S_2 37°55′ 128°59′	S_3 37°54′ 129°08′	S_4 37°58′ 129°37′	05	07	08	09
11	11	11	11	11	11	11	10
1300	1135	1020	0855	0650	0400	0130	2235
15.70	15.70	15.80	15.90	15.30	17.70	16.30	16.00
15.40	15.30	15.50	15.40	14.80	17.50	16.10	15.67
15.30	15.22	15 46	15.40	14.80	17.45	16.05	15.60
13.52	15.22	15.41	15.19	14.78	17.40	16.00	15.60
2.88	4.31	4.60	4.40	5.42	11.00	10.00	15.57
—	1.02	1.65	1.88	2.08	3.59	4.82	9.61
—	0.72	0.50	1.19	1.16	1.70	3.03	6.80
—	0.60	0.50	0.80	0.61	0.81	0.98	1.48
1.95	—	—	—	—	—	—	—
34.18	34.16	34.20	34.16	33.91	34.16	34.63	33.51
34.07	34.07	34.11	34.16	34.02	34.47	33.98	33 60
34.07	34.16	34.16	34.22	34.00	34.43	34.09	33.51
34.06	34.05	34.25	34.11	34.52	34.38	34.02	33.24
34.13	34.23	34.18	34.18	34.07	34.16	34 52	34.13
—	34.16	34.14	34.43	34.00	34.25	34.42	34.04
—	34.07	34.25	34.27	34.09	34.16	34.22	33.87
—	34.14	34.07	34.14	34.29	34.00	34.16	33 86
34.13	—	—	—	—	—	—	—
115	—	—	—	—	—	—	—
17.0	20.0	18.0	18.0	18.0	—	—	—
3	3	3	3	—	—	—	—
1	2	3	4	4	—	—	—
1	1	1	2	2	3	2	2
14.8	12.3	12.3	11.0	9.5	12.0	12.5	13.0
769.0	770.0	770.0	768.5	768.5	767.0	767.0	766.5
SW. 1	W. 2	NW. 3	NW. 3	NW. 4	NW. 5	W. 3	W. 3
0	0	0	Ns. 1	1	—	—	—
B	B	B	B	B	BC	BC	BC

C. 105선 해 양 관 측 성 적

Oceanographic Data, Line 105

Date		① June 1961						
Station Number		03	04	05	06	07	08	09
Day		23	23	23	23	23	23	23
Item	Time / Z(m)	1230	1135	1020	0815	0530	0255	0020
T °C	0	16 20	18 80	18.50	18.50	19.10	19.80	19.70
	10	11.92	15.16	15.64	18.01	19.30	19.06	18.71
	25	6.04	10.42	14.61	15.12	14.72	15.95	15.02
	50	—	6.21	12.71	14.82	14.65	12.70	14 56
	100	—	2.24	3.80	9.34	10 52	9.65	9.26
	150	—	—	1.42	1.95	9.71	8.92	2.90
	200	—	—	—	1.40	6.64	6 72	1.62
	300	—	—	—	0.71	2.10	1.40	0.71
	Botm.	4.12	1.40	0.92	—	—	—	—
S ‰	0	34.40	34 22	34 05	33.86	34 22	34 36	34.33
	10	34 29	34 33	34.04	33.86	34 15	34 40	34 24
	25	34.15	34.29	34.40	34.40	34 43	34 33	34.67
	50	—	34.22	34.54	34.56	34.51	34 51	—
	100	—	34.07	34.07	34.31	34 51	34.33	34.33
	150	—	—	34.07	34.04	34.47	34.33	34.00
	200	—	—	—	34 04	34.24	34 22	34 04
	300	—	—	—	34.05	34.11	34 05	34.05
	Botm.	34.04	34.07	34.05	—	—	—	—
Sounding (m)		80	180	360	—	—	—	—
Transp. (m)		9	10	12	14	—	—	—
Color		4	4	3	2	—	—	—
Wave		2	4	4	4	5	4	4
Swell		1	2	2	2	2	2	1
Air Temp. (°C)		23.1	21.20	20 6	19.50	19.70	20 3	—
Air Press. (mm)		762	763	763	762	765	764	763
Wind		NE. 3	NE. 4	NW. 4	SW. 4	S. 5	SE. 4	SE. 4
Cloud		Cu. 8	Cu 8	Cc. 10	St. 10	Sc 8	—	—
Weather		C	C	C	R	R	BC	BC

		② July 1961						
10	11	03	04	05	06	07	03	09
22	22	29	29	29	29	29	29	27
2150	1910	1005	1110	1305	1505	1745	2040	2325
19 00	19 80	21. 40	23. 10	23. 70	21. 30	23. 30	24. 50	23 70
18. 36	18. 73	14 93	21. 43	19. 62	19. 52	23. 20	23. 70	20. 70
17. 34	17. 00	11. 20	12. 10	15. 00	16. 80	17. 40	15. 30	16 42
10. 83	12. 03	5. 42	6. 20	14. 40	15 65	11. 32	9 75	13. 10
3. 35	5. 71	—	2. 62	5. 45	9. 62	9. 60	9 70	9 63
1. 73	2 42	—	1. 55	2. 43	8. 60	9. 45	9 45	9. 40
1. 02	1. 14	—	—	1. 52	4. 02	9. 00	9 30	8. 80
0. 53	0 61	—	—	0. 83	1. 30	6. 40	6 92	4 45
—	—	—	—	—	—	—	—	—
34. 22	34 36	33. 77	33. 73	33. 78	34. 20	33. 15	33 68	33. 21
34. 15	34. 33	33. 87	33. 68	33. 68	33. 40	33. 66	33. 71	33. 50
34. 18	34. 22	34 09	34. 20	34. 16	34. 20	34. 11	34. 13	34. 20
34. 40	34. 36	33. 93	34. 02	34. 33	34. 29	34. 13	34. 18	34 29
34. 24	34. 33	—	33. 86	33. 95	34. 22	34. 11	34 20	34. 24
34. 18	34 05	—	33. 93	33. 86	34. 11	34. 16	34 18	34 24
34. 07	34 02	—	—	33. 95	33. 93	34. 13	34. 20	34 29
34. 05	34 07	—	—	33. 86	33. 91	33. 95	34 05	34 02
—	—	—	—	—	—	—	—	—
—	—	80	—	—	—	—	—	—
—	—	13. 0	18. 0	19. 5	18. 0	17. 0	—	—
—	—	3	2	2	2	2	—	—
2	3	1	1	1	1	1	—	—
1	1	1	1	1	1	1	1	1
20 50	21. 50	25. 7	26. 5	27. 3	26. 5	25. 5	25. 5	25 0
763	—	761. 5	761. 5	762	763	762	763	761. 5
NE. 2	SW. 4	S/E. 2	SE. 2	SE. 2	E. 1	E. 1	E/S. 2	SE. 2
—	Sc. 10	Cs. 1	Cb. 1	Cb. 2	Cb. 4	Sc. 7	—	—
B	C	B	B	B	BC	BC	—	—

Date		③ September 1961							
Station Number		03	04	05	06	07	08	09	10
Day		2	2	2	2	2	3	3	3
Item	Time / Z(m)	1255	1410	1610	1810	2115	0020	0320	0630
T °C	0	23.50	24.80	26 60	27.20	27.20	25.40	25 50	25.50
	10	22.55	24.24	25.40	25.40	26.50	22.85	25.15	25.25
	25	19.30	15.80	18.56	18.35	24.15	21.60	21.30	22.06
	50	8.70	9.53	13.05	16.05	19.06	16 45	16 05	18 03
	100	—	3.23	6.73	12.05	15.63	10 25	14.30	15.43
	150	—	0 93	1.60	14.00	8.50	9.60	9.50	10.25
	200	—	—	0.60	1.35	3.15	9.23	9.40	7.25
	300	—	—	0.54	0.83	1.05	5 50	5.25	1.70
	Botm.	—	—	—	—	—	—	—	—
S ‰	0	31.76	31.49	30.81	30.68	32.29	31 91	31.85	32.03
	10	32.14	31.58	31.53	31.29	32.23	32.88	31.76	31.94
	25	33.03	34.11	33.17	32.74	33.21	33.55	34.31	33.55
	50	33.93	34.43	34.51	34.47	34 47	34.52	34 61	34.51
	100	—	34.07	34.52	34.60	34.67	34 54	34 54	34.60
	150	—	34.07	34.13	34.33	34.52	34.52	34 60	34.58
	200	—	—	34.25	34.24	34.34	34.52	34 54	34.43
	300	—	—	34.22	34.20	34.34	34.34	34 31	34.24
	Botm.	—	—	—	—	—	—	—	—
Sounding (m)		79	—	—	—	—	—	—	—
Transp. (m)		13	15	20	19	—	—	—	—
Color		4	3	3	3	—	—	—	3
Wave		2	3	3	2	—	—	—	—
Swell		1	1	1	1	2	1	1	2
Air Temp. (°C)		24.4	24 7	24.5	23.7	24.0	23 5	24.5	24.5
Air Press. (mm)		763	762.5	762.5	761	762	760	760	760
Wind		N. 2	SE. 2	E. 3	NE. 2	E. 3	E. 3	E. 4	E. 4
Cloud		Cc. 6	Sc. 8	Cb. 4	Sc. 3	—	—	—	Cc. 10
Weather		BC	C	BC	BC	—	—	—	C

	④ September 1961							
11	03	04	05	06	07	08	09	10
3	26	26	26	26	26	26	26	26
0900	2120	2005	1800	1610	1345	1110	0905	0640
26.40	23.00	23.60	23.10	23.70	24.20	23.30	24.50	25.40
25.95	21.98	22.89	22.56	23.40	23.56	22.85	23.24	24.35
23.65	18.95	20.26	22.00	23.40	23.33	22.52	23.00	23.98
18.30	8.30	13.93	18.42	19.60	20.35	18.90	19.25	22.80
13.50	—	2.53	11.46	12.13	16.37	15.40	15.40	16.47
6.55	—	0.95	2.00	2.88	9.80	10.23	10.14	11.25
3.43	—	—	0.80	1.06	4.20	3.70	5.22	9.58
1.15	—	—	0.67	0.88	1.10	1.26	1.30	1.92
—	—	—	—	—	—	—	—	—
31.82	—	32.94	32.32	31.40	32.52	32.30	32.52	32.63
31.76	—	32.92	32.38	32.29	—	—	32.47	32.63
32.83	—	32.92	32.66	32.54	32.39	32.47	32.34	32.63
34.43	—	34.36	34.47	34.34	34.04	34.20	34.29	33.86
34.58	—	34.09	34.40	34.49	34.13	34.47	34.34	34.45
34.38	—	33.75	33.98	33.87	34.40	34.38	34.34	34.45
34.25	—	33.75	33.98	33.87	34.09	34.04	33.95	34.29
34.25	—	33.91	33.98	34.07	34.02	34.04	34.04	33.96
—	—	—	—	—	—	—	—	—
—	80	—	—	—	—	—	—	—
19.5	—	—	—	23	25	24	25	25
3	—	—	—	3	2	2	2	2
—	—	—	4	4	4	1	1	0
2	1	1	1	1	1	1	1	1
25.7	21.8	22.1	22.3	24.3	26.5	22.8	21.7	19.8
760.5	—	762.5	763	763	762.5	762.5	763	762
E. 4	NW. 3	ENE. 4	NE. 4	N. 4	N. 3	N. 2	N. 1	NE. 1
Sc. 9	—	—	Sc. 9	Cb. 7	Cs. 7	Cb. 9	Cb. 9	Sc. 9
C	—	—	C	BC	BC	C	C	C

Date		⑤ November 1961							
Station Number		03	04	05	06	07	08	09	10
Day		2	2	2	2	2	2	2	2
Item	Time / Z(m)	1635	1535	1340	1155	0940	0725	0520	0305
T °C	0	20.30	20.20	21.00	20.80	19.10	19.00	18.80	19.20
	10	19.96	19.83	20.70	20.30	19.00	18.85	18.50	18.90
	25	19.92	19.50	20.32	20.30	18.78	18.82	18.20	18.80
	50	13.42	12.30	14.10	20.25	18.70	18.70	17.48	18.80
	100	—	5.32	5.32	11.93	16.75	15.82	14.80	15.25
	150	—	1.23	2.42	3.58	8.40	9.38	11.13	9.93
	200	—	—	1.28	1.90	2.88	5.00	5.45	8.87
	300	—	—	0.80	0.95	1.04	1.50	1.37	3.53
	Botm.	1.45	—	—	—	—	—	—	—
S ‰	0	33.58	33.68	33.86	33.60	33.48	33.42	33.49	—
	10	33.58	33.66	33.98	33.60	33.48	33.42	33.49	34.47
	25	33.77	33.58	33.84	33.57	33.49	33.42	33.66	33.24
	50	34.38	33.54	33.66	33.82	33.49	33.68	34.51	33.28
	100	—	34.16	34.20	34.45	34.47	34.56	34.51	34.49
	150	—	34.11	34.11	34.20	34.27	34.40	34.47	34.47
	200	—	—	34.09	34.11	34.11	34.18	34.22	34.11
	300	—	—	34.16	34.11	34.11	34.11	34.11	34.11
	Botm.	34.04	—	—	—	—	—	—	—
Sounding (m)		80	—	—	—	—	—	—	—
Transp. (m)		12	13	15	14.5	15	—	—	—
Color		—	—	—	—	—	—	—	—
Wave		4	3	3	4	3	3	—	—
Swell		2	2	2	2	2	2	1	1
Air Temp. (°C)		16.7	16.8	18.0	18.5	18.0	17.5	17.5	16.7
Air Press. (mm)		771.5	771.5	771.5	772	773.5	773.5	773.5	773.5
Wind		NW. 4	NW. 3	NW. 3	SE. 4	E. 3	E. 3	—	—
Cloud		Cb. 10	Sc. 10	Sc. 9	Sc. 9	Cc. 9	Sc. 10	—	—
Weather		C	C	R	C	C	C	C	C

⑥ December 1961							
03	04	05	06	07	08	09	10
16	16	16	16	16	16	16	16
0840	0950	1150	1320	1540	1820	2115	2330
15.00	15.70	16.90	17.30	15.70	16.20	15.80	15.60
14.73	15.38	16.62	17.15	15.43	15.80	15.32	15.36
14.70	15.33	16.60	17.00	15.40	15.40	15.32	15.36
14.70	15.25	16.60	16.95	15.40	14.83	15.10	15.36
—	4.76	8.68	15.90	15.00	14.75	14.31	15.17
—	1.60	2.10	2.60	9.22	10.15	10.16	15.07
—	—	1.29	1.12	3.40	9.33	8.90	9.80
—	—	0.70	0.80	0.71	4.42	4.98	3.58
1.60	0.62	—	—	—	—	—	—
34.31	34.16	34.40	34.31	34.07	34.31	34.11	34.16
34.25	34.16	34.25	34.43	34.09	34.23	34.14	34.00
34.23	34.34	34.31	34.34	34.20	34.11	34.25	34.04
34.22	34.18	34.29	34.34	34.13	34.16	34.11	34.14
34.18	34.18	34.33	34.69	34.07	34.14	34.51	34.07
—	34.20	34.14	34.16	34.51	33.37	34.61	34.43
—	34.11	34.25	34.13	34.16	34.34	34.42	34.52
—	—	34.16	34.22	34.14	34.34	34.18	34.16
34.16	34.07	—	—	—	—	—	—
80	180	—	—	—	—	—	—
15	15	16	19	19	—	—	—
3	4	3	3	3	—	—	—
2	1	1	1	0	—	—	—
1	1	1	1	1	—	—	—
7.0	9.0	9.2	9.5	10.0	9.3	9.8	9.2
769.5	770	770	769	768	769	768.5	768
WNW. 1	NW. 1	E. 1	SW. 1	N. 1	SW. 2	S. 2	SE. 3
Cs. 7	Cc. 7	Cc. 9	Sc. 10	As. 9	As. 10	10	10
BC	BC	C	C	C	C	R	R

D. 104 선 해양관측성적

Oceanographic Data, Line 104

Date		① June 1961						
Station Number		04	05	06	07	08	09	10
Day		21	21	21	21	21	21	21
Item	Time / Z(m)	0555	0650	0915	1125	1414	1645	1910
T °C	0	18.50	17.80	18.50	21.70	21.50	20.50	20.50
	10	16.03	16.02	17.10	17.12	18.12	18.80	18.52
	25	13.10	14.52	14.50	14.42	15.80	15.61	16.21
	50	6.12	11.93	13.40	11.83	14.91	14.82	10.43
	100	—	2.82	4.12	4.12	10.69	11.43	3.64
	150	—	2.12	2.03	2.10	5.01	3.31	1.92
	200	—	—	1.42	1.32	2.42	1.83	1.11
	300	—	—	0.64	0.71	0.92	0.82	0.23
	400	—	—	0.64	0.71	0.92	—	—
	Botm.	2.21	1.12	—	—	—	—	—
S ‰	0	34.22	34.07	33.89	34.22	33.87	34.22	34.22
	10	—	34.07	34.05	34.15	33.71	34.22	34.18
	25	34.42	34.51	34.51	34.51	34.24	34.33	34.24
	50	34.05	34.47	34.33	34.43	34.51	34.47	34.24
	100	—	34.00	34.11	34.15	34.54	34.42	34.11
	150	—	34.07	34.07	34.05	34.15	34.05	34.00
	200	—	—	34.07	34.05	33.96	34.07	33.96
	300	—	—	34.07	34.05	34.05	34.05	34.11
	400	—	—	34.07	34.05	34.15	34.05	34.15
	Botm.	34.05	33.96	—	—	—	—	—
Sounding (m)		103	200	—	—	—	—	—
Transp. (m)		12	10	11	12	14.5	17	—
Color		4	5	4	4	3	2	—
Wave		3	3	2	2	1	2	—
Swell		1	2	1	1	1	1	1
Air Temp. (°C)		19.40	19.20	20.50	25.5	26.50	21.70	21.7
Air Press. (mm)		763	763	763	764	763	763	763
Wind		NW. 2	NW. 3	NW. 3	0	SE. 2	SW. 3	S. 2
Cloud		Cu. 4	Cc. 4	Ci. 4	Cc. 2	Ci. 1	Ci. 2	2
Weather		BC	BC	BC	B	B	B	B

② July 1961				③ August 1961						
07	08	09	10	04	05	06	07	08	09	10
31	31	31	31	20	20	20	20	20	20	20
1003	0714	0357	0048	1025	1136	1325	1455	1745	2038	2318
19.06	23.50	24.50	23.50	25.70	23.80	26.80	27.60	27.30	27.40	27.60
16.92	19.90	19.94	19.35	23.42	17.75	20.81	18.85	23.85	27.22	27.62
8.60	15.70	16.68	17.58	15.88	11.98	16.15	16.25	17.78	25.82	26.80
5.10	13.22	13.80	16.34	8.85	8.82	10.11	10.15	14.72	15.45	18.66
2.38	5.95	8.19	16.16	—	5.28	4.55	2.98	4.72	10.35	16.35
1.20	2.20	3.34	7.88	—	1.62	1.51	1.68	2.05	6.25	12.22
—	1.22	1.64	3.54	—	—	0.75	1.28	1.28	1.98	3.28
—	0.70	0.60	2.32	—	—	-0.25	0.88	0.85	1.01	1.08
—	0.46	0.35	1.08	—	—	-0.75	-0.21	0.48	0.81	0.82
—	—	—	—	7.33	1.51	—	—	—	—	—
33.95	26.85	30.50	31.35	32.90	33.26	30.63	30.86	30.55	30.93	31.13
33.95	34.13	32.68	32.65	32.90	33.26	33.17	33.08	31.58	31.18	31.13
34.13	34.29	34.24	33.15	34.22	34.05	34.05	33.69	33.35	31.69	32.20
33.95	34.29	34.42	34.09	34.15	34.24	34.24	34.27	34.42	33.44	33.68
33.96	34.00	34.22	34.42	—	33.96	33.98	33.98	34.05	34.27	34.42
33.86	33.91	33.86	34.22	—	33.87	33.96	33.96	33.93	34.07	34.42
—	33.89	34.02	34.05	—	—	33.93	33.96	33.96	33.96	34.00
—	34.04	33.98	34.22	—	—	33.96	33.96	33.96	33.98	33.96
—	33.86	33.84	33.98	—	—	33.96	33.96	33.96	33.96	33.96
—	—	—	—	33.96	33.87	—	—	—	—	—
—	—	—	—	100	200	—	—	—	—	—
12	13	—	—	13	13	12	16	16	—	—
3	3	—	—	4	4	4	4	4	—	—
2	3	2	1	1	2	2	2	2	3	2
1	1	1	1	1	1	1	1	1	1	1
26.0	26.5	26	26	27.0	27.5	28.0	29.0	28.0	28.5	27.5
757.5	758	760	759	756.5	757	757	756.5	756.5	757	757.5
NNW. 2	NE. 2	NW. 2	NE. 2	NE. 2	NE. 2	NE. 2	N. 2	N. 2	NE. 2	NW. 3
10	Ns. 10	Ns. 10	10	Ci. 2	Cs. 5	St. 7	Cs. 7	Cs. 8	Cs. 8	Cc. 7
F	C	C	F	B	BC	BC	BC	C	C	BC

Date		④ September 1961						
Station Number		04	05	06	07	08	09	10
Day		28	28	28	28	28	29	29
Item	Time / Z(m)	1355	1530	1725	2020	2310	0145	0410
T °C	0	23.30	23.50	22.70	24.20	24.50	25.50	24.70
	10	21.68	21.93	21.10	23.87	24.23	25.18	24.32
	25	17.62	16.20	18.35	23.00	24.15	24.72	23.92
	50	7.47	10.27	11.07	14.40	19.12	21.00	20.50
	100	—	2.65	4.41	3.26	8.38	17.26	15.70
	150	—	—	1.70	1.65	3.17	7.64	7.22
	200	—	—	0.89	1.08	1.40	2.27	3.02
	300	—	—	0.60	0.68	0.37	0.80	0.96
	Botm.	1.90	1.12	—	—	—	—	—
S ‰	0	—	32.39	33.52	32.21	32.29	33.06	32.57
	10	—	32.38	32.56	32.25	32.39	33.01	32.56
	25	—	34.45	33.42	33.46	33.17	33.17	32.59
	50	—	34.31	34.31	34.38	33.24	33.22	33.17
	100	—	34.04	34.13	34.05	34.31	34.49	34.49
	150	—	—	34.04	34.07	34.13	34.27	34.27
	200	—	—	34.09	34.05	34.09	34.13	34.13
	300	—	—	34.13	34.09	34.24	34.13	34.05
	Botm.	—	34.22	—	—	—	—	—
Sounding (m)		100	197	—	—	—	—	—
Transp. (m)		16	16	17.5	—	—	—	—
Color		4	4	3	—	—	—	—
Wave		2	2	2	—	—	—	—
Swell		1	1	1	1	1	1	1
Air Temp. (°C)		23.5	24.5	23.0	22.2	22.3	22.3	22.3
Air Press. (mm)		766	766	765.5	766	766	766	765.5
Wind		N. 2	N. 1	N. 1	N. 1	NW. 1	SE. 1	SE. 2
Cloud		Cc. 4	Cs. 3	Cs. 4	—	—	—	—
Weather		BC	BC	BC	—	—	—	—

⑤ November 1961						
04	05	06	07	08	09	10
1	1	1	1	1	1	1
1005	1110	1240	1515	1730	1950	2230
19. 30	20. 10	20. 40	20. 50	21. 00	18. 50	18. 20
19. 35	19. 85	20. 35	20. 38	20. 58	18. 15	17. 90
19. 23	19. 67	20. 30	20. 20	20. 54	18. 03	13. 88
12. 94	19. 60	20. 20	20. 20	19. 30	17. 56	17. 60
2. 47	3. 88	6. 10	9. 08	16. 07	15. 30	9. 93
—	—	2. 83	2. 46	7. 40	8. 20	3. 60
—	—	0. 90	1. 15	1. 80	3. 06	1. 75
—	—	0. 35	0. 78	0. 90	1. 27	0. 90
2. 40	1. 49	—	—	—	—	—
33. 24	33. 40	33. 59	33. 50	33. 60	33. 42	33. 33
33. 24	33. 39	33. 59	33. 50	33. 51	33. 40	33. 33
33. 91	33. 40	33. 73	33. 89	33. 60	33. 35	33. 33
34. 11	33. 59	33. 73	33. 95	33. 42	33. 35	34. 42
34. 11	34. 11	34. 20	34. 29	34. 38	34. 36	34. 38
—	—	34. 11	34. 18	34. 31	34. 36	34. 16
—	—	34. 11	34. 11	34. 20	34. 18	34. 11
—	—	34. 11	34. 11	34. 11	34. 11	34. 11
33. 42	34. 11	—	—	—	—	—
105	197	—	—	—	—	—
13	13	15	14	—	—	—
4	4	4	4	—	—	—
3	4	3	3	4	—	—
1	1	1	1	2	1	1
15. 7	16. 8	17. 3	17. 3	17. 5	16. 5	16. 5
773. 5	773. 5	773. 5	773	773. 5	773. 5	773. 5
NNW. 3	NNW. 3	NNW. 3	NE. 3	NE. 4	NE. 2	E. 3
Sc. 2	Ns. 2	Cc. 3	Ci. 4	Sc. 5	—	—
B	B	BC	BC	BC	BC	BC

Date		⑥ December 1961					
Station Number		S_1 37°04′ 129°29′	S_2 37°04′ 129°34′	S_3 37°04′ 130°04′	S_4 37°04′ 130°04′	S_5 37°04′ 130°26′	S_6 37°04′ 130°40′
Day		17	17	17	17	17	17
Item	Time / Z(m)	1435	1545	1220	0955	0730	0450
T °C	0	15.00	15.80	16.20	16.00	15.50	15.40
	10	14.55	15.30	15.70	15.70	15.20	14.98
	25	14.52	15.12	15.41	15.12	15.20	14.98
	50	13.98	7.32	15.20	15.08	15.20	14.62
	100	5.50	2.21	10.80	14.89	15.04	9.60
	150	—	1.34	2.31	9.10	10.20	9.21
	200	—	1.05	0.95	5.82	8.88	3.30
	300	—	—	0.54	1.42	3.65	—
	Botm.	—	—	—	—	—	—
S ‰	0	34.11	34.18	34.25	34.14	34.04	34.02
	10	34.18	34.18	34.20	34.11	34.00	34.14
	25	34.09	34.43	34.09	34.09	34.14	34.02
	50	34.09	34.29	34.42	34.05	34.02	34.00
	100	34.35	34.16	34.43	34.02	34.45	34.14
	150	—	34.18	34.20	34.51	34.51	34.43
	200	—	34.14	34.20	34.27	34.36	34.34
	300	—	—	34.16	34.16	34.35	34.23
	Botm.	—	—	—	—	—	—
Sounding (m)		100	200	—	—	—	—
Transp. (m)		12	12	12	16	—	—
Color		4	4	4	—	—	—
Wave		4	4	2	3	3	—
Swell		2	2	1	1	1	1
Air Temp. (°C)		9.8	10.5	11.0	10.7	10.3	9.8
Air Press. (mm)		758	759	759	761.5	762	764.5
Wind		NW. 4	N. 5	NW. 2	NE. 3	SE. 3	S. 3
Cloud		Sc. 10	Sc. 10	Sc. 10	Cc. 10	Cc. 10	Cc. 10
Weather		C	C	R	R	R	R

E. 103선 해 양 관 측 성 적 표

Oceanographic Data, Line 103

Date		① June 1961					
Station Number		04	05	06	07	08	09
Day		20	20	20	20	20	20
Item	Time / Z(m)	1000	0910	0740	0540	0300	0030
T °C	0	18.30	18.10	18.00	18.50	19.00	19.10
	10	16.02	13.41	14.41	17.03	17.63	18.81
	25	12.23	8.92	8.92	17.01	14.12	18.42
	50	6.02	5.43	3.92	5.04	14.02	15.23
	100	—	2.61	1.62	1.32	3.91	13.32
	150	—	—	1.13	0.91	2.40	8.62
	200	—	—	0.83	0.64	1.42	2.21
	300	—	—	—	0.54	0.91	0.92
	Botm.	3.00	1.90	—	—	—	—
S ‰	0	34.22	34.24	34.25	34.33	33.71	33.57
	10	34.22	34.36	34.33	34.36	33.89	33.64
	25	34.40	34.25	34.40	34.40	34.36	34.18
	50	34.20	34.25	34.15	34.18	34.52	34.16
	100	—	34.36	34.11	34.11	34.15	34.60
	150	—	—	34.04	34.09	34.11	34.29
	200	—	—	34.04	34.04	34.04	34.09
	300	—	—	—	34.18	34.00	34.07
	Botm.	34.04	34.05	—	—	—	—
Sounding (m)		100	198	—	—	—	—
Transp. (m)		12	11	13	15	—	—
Color		4	4	4	—	—	—
Wave		2	2	2	3	—	—
Swell		1	1	1	1	—	—
Air Temp. (°C)		18.7	18.5	18.7	18.5	19.5	19.5
Air Press. (mm)		764	764	765	765	765	765
Wind		SW. 3	SW. 3	S. 3	SW. 4	SW. 4	S. 2
Cloud		Sc. 10	Sc. 10	Sc. 10	Sc. 10	—	—
Weather		R	R	C	R	R	R

Date		② July 1961						
Station Number		04	05	06	07	08	09	10
Day		30	30	30	30	30	30	30
Item	Time / Z(m)	0745	0843	1115	1320	1549	1832	2104
T °C	0	18.10	16.90	17.20	20.00	20.20	25.00	26.00
	10	11.18	13.10	15.13	17.86	17.96	20.05	22.10
	25	6.88	6.30	10.15	10.90	10.95	18.84	20.14
	50	3.22	3.34	4.47	5.08	5.64	16.15	18.30
	100	—	2.15	3.12	2.70	2.34	10.64	16.02
	150	—	1.62	—	1.50	1.78	2.85	8.48
	200	—	—	—	0.56	0.86	1.24	3.10
	300	—	—	—	0.45	0.52	0.78	2.16
	400	—	—	—	0.32	0.40	0.54	1.13
	Botm.	2.31	1.02	1446	—	—	—	—
S ‰	0	34.11	34.24	34.07	34.00	34.05	30.30	29.94
	10	34.25	34.13	34.15	34.02	33.96	32.09	32.52
	25	34.29	34.24	34.33	34.34	34.33	34.05	33.77
	50	34.04	24.16	34.24	34.15	34.22	34.05	34.20
	100	—	33.98	34.00	33.96	34.09	34.29	34.45
	150	—	34.05	—	33.96	34.15	34.16	34.40
	200	—	—	—	33.98	34.05	34.05	34.05
	300	—	—	—	34.05	34.05	34.02	34.42
	400	—	—	—	34.15	34.05	34.07	34.15
	Botm.	33.98	34.09	3405	—	—	—	—
Sounding (m)		102	192	—	—	—	—	—
Transp. (m)		7	8	7	11	8	10	—
Color		4	4	4	3	4	3	—
Wave		2	3	2	2	1	2	1
Swell		1	1	1	1	1	1	1
Air Temp. (°C)		21	23	24	25	26.5	26.0	27
Air Press. (mm)		759	759	760	759.5	759	759	759
Wind		NNE. 2	NNE. 2	NNE. 2	N. 2	NW. 1	NE. 3	E. 2
Cloud		Cc. 9	Cs. 9	F. 10	F. 10	F. 10	Cs. 10	Cc. 7
Weather		C	C	C	C	C	C	BC

③ August 1961						
04	05	06	07	08	09	10
21	21	21	21	21	21	21
1752	1615	1512	1323	1043	0710	0432
23.80	24.00	24.80	27.10	26.00	27.60	27.50
19.32	15.01	21.31	20.38	20.25	27.32	27.48
13.33	13.58	12.92	13.38	12.47	25.11	26.12
7.98	9.12	7.62	6.52	6.75	13.85	20.05
4.45	4.51	2.91	2.85	2.68	5.15	17.48
—	—	1.45	1.18	1.55	4.02	11.38
—	—	—	—	1.45	3.31	3.55
—	—	—	—	0.68	1.95	1.18
—	—	—	—	0.48	0.98	0.82
—	—	—	—	—	—	—
32.83	32.88	32.88	32.85	31.00	30.72	31.02
32.86	34.04	32.88	33.21	33.37	30.95	31.04
34.29	34.24	34.22	34.18	34.09	31.13	32.12
34.33	34.34	34.24	34.15	34.18	33.62	33.53
34.15	34.07	34.05	33.96	34.05	34.13	34.20
—	—	33.96	33.96	33.91	34.05	34.31
—	—	—	—	33.96	33.96	34.05
—	—	—	—	33.96	33.96	33.95
—	—	—	—	33.96	33.96	33.96
—	—	—	—	—	—	—
—	—	—	—	—	—	—
13	15	14	16	25	21	—
4	4	4	4	3	2	—
4	4	4	3	2	2	2
2	2	2	1	1	1	1
28.0	28.5	27.5	27.2	27.7	28.7	28.0
756	756	756.8	755.8	757	757.5	757
NNE. 5 Ci. 5 BC	NNE. 4 Ci. 4 BC	NNW. 4 Cc. 6 BC	S. 2 St. 5 BC	S. 2 Ci. 2 B	SE. 1 St. 6 BC	NE. 2 3 BC

Date		④ September 1961						
Station Number		04	05	06	07	08	09	10
Day		29	29	29	29	29	29	29
Item	Time / Z(m)	2330	2115	1900	1700	1415	1140	0845
T °C	0	22.70	23.20	23.80	23.30	25.20	25.00	25.70
	10	22.00	21.93	21.90	23.02	24.50	24.98	25.02
	25	19.97	15.39	20.03	17.17	24.42	24.70	24.85
	50	9.50	11.37	11.95	11.03	17.16	18.59	21.92
	100	2.10	3.93	3.36	2.83	3.13	9.96	16.32
	150	—	1.20	1.86	1.46	1.43	3.21	8.85
	200	—	—	0.58	0.60	0.94	1.24	1.86
	300	—	—	0.30	0.22	0.60	0.39	0.90
	400	—	—	—	—	—	—	—
S ‰	0	32.12	32.52	32.29	32.20	32.72	32.38	33.08
	10	32.25	32.50	32.34	32.20	32.72	33.24	33.17
	25	32.63	34.02	33.33	34.34	32.88	33.33	34.13
	50	34.34	34.31	34.49	34.11	33.71	33.03	34.29
	100	34.20	34.18	34.13	34.11	34.13	34.36	34.52
	150	—	34.04	34.22	34.22	34.09	34.11	34.47
	200	—	—	34.20	34.07	34.05	34.11	34.07
	300	—	—	34.13	33.24	34.13	34.04	34.11
	400	—	—	—	—	—	—	—
Sounding (m)		105	198	—	—	—	—	—
Transp. (m)		—	—	—	20	24	23	28.5
Color		—	—	—	3	3	3	3
Wave		—	—	—	3	3	3	0
Swell		1	1	1	1	1	1	1
Air Temp. (°C)		22.5	23.6	23.8	24.5	26.2	26.0	24.1
Air Press. (mm)		762.0	763.0	763.0	764.0	764.5	765.5	765.0
Wind		S. 2	SW. 3	SW. 3	S. 3	S. 3	S. 3	0
Cloud		—	—	—	St. 1	Ns. 1	Ns. 1	St. 1
Weather		B	B	B	B	B	B	B

⑤ October 1961			⑥ December 1961						
04	05	06	04	05	06	07	08	09	10
31	31	31	18	18	18	18	18	18	18
1110	1200	1345	0827	0943	1234	1449	1634	1844	2038
20. 30	20. 20	21. 30	15. 30	14. 25	16. 20	15. 20	14. 80	13. 90	15. 20
20. 35	19. 43	21. 03	15. 16	14. 00	15. 85	15. 11	14. 59	14. 15	15. 44
20. 30	19. 28	20. 90	15. 74	14. 03	15. 79	15. 03	14. 74	14. 03	15. 54
18. 43	18. 62	20. 81	14. 02	13. 24	15. 61	14. 94	14. 76	13. 97	14. 70
2. 91	4. 34	6. 70	4. 27	2. 17	11. 46	14. 43	14. 90	9. 03	12. 12
—	1. 43	2. 90	—	—	3. 06	13. 68	10. 23	3. 99	2. 49
—	1. 27	—	—	—	1. 38	1. 97	6. 08	1. 66	1. 23
—	—	—	—	—	—	0. 67	1. 38	0. 71	0. 55
—	—	—	—	—	—	0. 40	0. 62	0. 37	0. 90
33. 42	33. 33	33. 66	33. 98	34. 22	34. 27	33. 91	—	34. 20	34. 20
33. 57	33. 33	33. 82	33. 98	34. 02	34. 04	34. 00	33. 96	33. 95	34. 04
33. 68	33. 42	33. 82	34. 24	34. 02	34. 04	34. 04	33. 89	33. 80	34. 11
33. 48	33. 42	33. 77	33. 98	34. 27	34. 16	33. 98	34. 00	33. 87	33. 87
34. 11	34. 15	34. 20	33. 98	33. 89	34. 27	34. 49	—	34. 24	34. 25
—	34. 09	34. 20	—	—	33. 98	—	—	34. 02	34. 11
—	24. 09	—	—	—	34. 00	34. 00	34. 22	33. 98	34. 07
—	—	—	—	—	—	33. 98	34. 05	33. 98	34. 11
—	—	—	—	—	—	34. 05	34. 09	34. 05	34. 11
105	—	—	105	—	—	—	—	—	—
13	13	13. 5	9	8	13	15	15	—	—
4	4	4	3	3	3	3	3	—	—
3	4	5	4	4	3	3	4	4	4
1	2	2	2	2	2	2	2	3	3
17. 5	17. 8	17. 5	10. 0	11. 00	17. 00	13. 20	13. 90	12. 00	13. 20
772. 5	772. 5	771. 5	765	765	765	764	764	763. 2	763
NE. 3	NE. 4	NE. 5	W. 3	W. 4	W. 2	SW. 2	SW. 2	SW. 3	SSW. 3
Cc. 3	Cs. 8	Cc. 7	Cu. 2	Cu. 2	Cu. 2	Cu. 2	Cu. 2	2	—
BC	C	BC	B	B	B	B	B	B	B

F 102선 해양관측성적

Oceanographic Data, Line 102

Date		① June 1961					② July 1961			
Station Number		05	06	07	08	09	05	06	07	08
Day		19	19	19	19	19	28	28	28	28
Item	Time / Z(m)	1115	1245	1537	1830	2045	0818	0932	1129	1440
T °C	0	19.0	19.30	19.00	19.50	19.70	15.20	15.50	17.50	22.70
	10	15.12	16.91	14.91	19.24	19.12	11.34	12.92	15.50	21.02
	25	11.09	12.43	12.03	15.70	18.01	6.46	7.20	13.24	18.04
	50	5.52	5.14	10.61	14.91	15.42	3.32	3.66	13.00	17.54
	100	—	2.23	4.41	14.03	13.24	—	1.50	8.22	15.20
	150	—	1.41	2.54	4.91	11.04	—	1.00	6.00	15.10
	200	—	—	1.54	2.30	3.62	—	—	3.84	10.29
	300	—	—	1.00	0.92	0.92	—	—	2.15	1.26
	400	—	—	—	—	—	—	—	1.76	1.02
	Botm.	2.32	—	—	—	—	1.26	—	—	—
S ‰	0	34.36	34.29	34.64	34.86	33.91	34.16	34.24	33.51	31.82
	10	34.36	34.27	34.25	33.89	34.00	34.25	34.33	33.89	32.47
	25	34.29	34.36	34.33	34.25	34.52	34.18	34.24	33.98	34.05
	50	34.25	34.11	34.40	34.52	34.60	34.15	34.15	34.15	34.43
	100	—	34.11	34.18	34.40	34.52	—	34.05	34.24	34.51
	150	—	34.11	34.07	34.09	34.43	—	34.58	34.15	34.43
	200	—	—	34.07	34.05	34.15	—	—	34.05	34.34
	300	—	—	34.09	34.09	34.15	—	—	34.24	34.05
	400	—	—	—	—	—	—	—	34.00	34.02
	Botm.	34.07	—	—	—	—	34.00	—	—	—
Sounding (m)		60	182	—	—	—	60	—	—	—
Transp. (m)		12	12	12	—	—	9	8	10	12
Color		4	4	—	—	—	6	6	5	4
Wave		1	2	2	1	—	2	4	3	3
Swell		1	1	1	1	—	2	2	1	1
Air Temp. (°C)		24.5	22.5	21.2	20.5	19.5	29	29	25.5	25
Air Press. (mm)		764	765	765	765	765	754	754	757	756
Wind		SW. 3	S. 3	S. 4	S. 3	—	S. 4	S. 3	S. 3	S. 2
Cloud		Cc. 8	Cc. 9	Cu. 10	Cu. 10	—	F. 10	F. 10	Ci. 7	Ci. 5
Weather		C	C	C	R	R	C	C	BC	BC

		③ August 1961						④ October 1961		
09	10	05	06	07	08	09	10	05	06	07
28	28	22	22	22	22	22	22	5	7	7
1734	1957	1213	1336	1532	1803	2055	2255	0920	0900	1100
22.50	24.00	23.00	24.40	25.00	28.70	28.00	28.20	22.80	23.50	23.80
18.56	22.46	20.89	19.42	14.08	27.11	27.78	28.11	22.31	22.92	23.73
17.74	20.10	12.08	10.82	11.81	15.89	26.28	23.95	22.00	22.60	23.42
17.70	17.35	7.38	6.02	6.18	15.78	18.38	19.12	9.90	9.89	3.46
15.52	12.92	2.81	2.68	1.75	5.88	15.15	15.18	2.32	1.95	3.32
7.04	7.80	—	1.48	1.11	2.25	4.12	7.32	—	1.23	1.20
4.48	2.50	—	1.02	0.89	1.31	1.53	2.35	—	0.76	0.73
0.90	1.21	—	0.71	0.59	0.82	0.75	1.02	—	0.65	0.70
0.56	0.80	—	0.52	0.48	0.72	0.71	0.82	—	—	—
—	—	2.65	—	—	—	—	—	1.68	—	—
32.79	31.60	33.59	33.13	31.64	31.42	31.15	31.78	32.52	34.10	33.42
33.04	32.23	33.55	33.71	33.89	31.60	31.11	31.94	32.47	33.22	33.17
32.45	34.15	34.25	34.33	34.33	33.01	32.54	32.70	32.72	33.62	33.50
33.68	34.42	34.33	34.04	34.24	34.45	34.00	33.80	34.31	34.27	34.83
34.52	34.60	34.05	34.04	34.02	34.24	34.51	34.51	34.11	34.04	34.11
34.33	34.24	—	34.05	33.96	34.05	34.15	34.24	—	34.13	34.20
34.02	34.04	—	34.00	34.07	33.98	33.96	34.04	—	34.04	34.05
34.04	34.24	—	34.05	33.98	33.96	34.05	34.05	—	34.04	34.04
33.71	34.43	—	34.19	33.96	34.05	33.98	33.96	—	—	—
—	—	34.05	—	—	—	—	—	34.20	—	—
—	—	180	—	—	—	—	—	182	—	—
14	—	19	12	10	22	—	—	12	15	—
3	—	4	4	5	4	—	—	4	4	4
3	3	2	2	2	3	2	2	2	4	5
2	2	2	2	2	2	2	2	1	2	3
25	26	26.0	27.0	28.0	29.0	28.5	28.6	23.2	19.0	20.5
755	757	757	756.5	756.5	756.5	757.5	757.4	763.5	762.0	762.0
S. 2	SE. 4	E. 2	SE. 1	S. 1	E. 2	E. 2	E. 2	N. 3	N. 4	NE. 5
Ci. 3 BC	Ci. 2 B	Ci. 6 BC	Cc. 5 BC	Cs. 6 BC	Ci. 6 BC	Ci. 8 C	Ci. 4 BC	Sc. 10 C	Ci. 2 B	Sc. 6 BC

Date		⑤ October 1961					
Station Number		05	06	07	08	09	10
Day		21	21	21	21	21	21
Item	Time / Z(m)	1200	1310	1443	1705	1925	2145
T °C	0	22.80	24.00	23.60	23.50	23.20	23.10
	10	21.93	23.95	23.41	23.15	22.62	22.98
	25	21.85	23.65	23.28	23.19	22.98	22.28
	50	11.56	18.38	18.45	23.25	24.85	21.92
	100	—	4.52	4.53	21.55	16.42	16.30
	150	—	1.98	2.72	8.98	6.45	10.23
	200	—	1.02	1.41	4.63	2.85	2.58
	300	—	0.71	3.58	0.98	0.95	1.55
	400	—	0.48	0.51	0.71	1.05	0.72
	Botm.	3.75	—	—	—	—	—
S ‰	0	32.66	34.07	33.80	33.91	33.57	33.57
	10	32.85	33.69	33.80	33.91	33.50	33.73
	25	33.12	33.73	33.82	33.95	33.71	33.50
	50	33.15	33.78	33.48	34.00	33.89	33.51
	100	—	33.90	34.09	34.43	34.52	33.57
	150	—	34.00	34.05	34.07	34.22	34.34
	200	—	34.00	34.09	34.27	34.00	34.02
	300	—	34.07	34.09	34.07	34.07	34.07
	400	—	34.07	34.09	34.07	34.07	34.07
	Botm.	34.33	—	—	—	—	—
Sounding (m)		56	—	—	—	—	—
Transp. (m)		12	16	15	12	—	—
Color		4	4	4	4	—	—
Wave		5	4	4	4	5	5
Swell		3	3	3	3	3	3
Air Temp. (°C)		22.5	22.8	20.8	20.1	18.8	20.2
Air Press. (mm)		—	—	—	—	—	—
Wind		E. 3	E. 3	E. 3	E. 3	E. 3	E. 4
Cloud		Cs. 4	St. 4	Ci. 3	St. 3	St. 1	St. 1
Weather		BC	BC	BC	BC	B	B

⑥ December 1961					
05	06	07	08	09	10
17	17	19	19	19	18
0737	0829	0603	0400	0150	2348
14. 92	15. 90	16. 99	17. 00	17. 00	14. 80
14. 91	15. 64	16. 77	16. 98	17. 12	14. 40
14. 91	15. 28	16. 88	17. 15	17. 07	14. 44
13. 64	15. 00	16. 95	17. 14	17. 01	14. 43
—	14. 61	16. 91	15. 28	16. 50	9. 96
—	13. 23	6. 69	14. 21	15. 49	3. 36
—	4. 00	1. 37	13. 83	9. 55	1. 28
—	0. 88	0. 52	0. 72	1. 66	0. 46
—	0. 57	0. 32	0. 44	0. 68	0. 25
4. 08	—	—	—	—	—
34. 18	34. 20	34. 29	34. 38	32. 57	33. 95
34. 16	34. 29	34. 29	34. 25	34. 25	33. 98
34. 11	34. 20	34. 29	34. 25	34. 29	33. 95
34. 11	34. 20	34. 34	34. 25	34. 29	33. 93
—	34. 38	34. 29	34. 25	34. 20	34. 38
—	34. 16	34. 29	34. 38	34. 25	34. 20
—	34. 11	34. 11	34. 11	34. 54	34. 11
—	34. 11	—	34. 04	34. 11	34. 11
—	34. 11	34. 07	34. 04	34. 11	34. 11
34. 18	—	—	—	—	—
—	—	—	—	—	—
8	7	—	—	—	—
3	3	—	—	—	—
4	3	5	5	3	3
2	2	3	3	3	3
11. 0	13. 0	9. 0	11. 0	12. 0	14. 1
760. 5	760	762	761	763	762
N. 3	SSE. 3	WNW. 6	WNW. 4	W. 4	W. 3
Sc. 10	Sc. 10	—	—	—	—
R	R	BC	BC	BC	B

남 해 해 양 조 사 성 적

OCEANOGRAPHIC OBSERVATIONS

SOUTHERN WATERS

1 9 6 1

A. 209선 해 양 관 측 성 적

Oceanographic Data, Line 209

Date		① July 1961					
Station Number		04	05	06	07	08	09
Day		29	29	29	29	29	29
Item	Time / Z(m)	1255	1038	0830	0640	0405	0102
T °C	0	13.00	24.40	24.90	25.60	24.60	22.20
	10	9.52	20.40	22.31	25.40	23.06	21.31
	25	7.18	16.32	21.40	22.18	22.05	19.38
	50	4.54	14.88	17.34	18.46	17.22	17.52
	100	—	7.87	14.46	14.52	16.78	14.66
	150	—	2.26	7.08	12.06	14.48	10.18
	200	—	—	4.00	4.46	—	—
	300	—	—	—	—	—	—
	400	—	—	—	—	—	—
	Botm.	3.29	1.50	—	—	—	—
S ‰	0	34.29	30.97	30.10	29.74	30.88	32.07
	10	34.33	31.29	30.97	31.85	32.03	32.32
	25	34.22	33.00	33.62	33.19	32.92	32.74
	50	34.05	34.34	34.16	33.80	33.60	33.50
	100	—	34.22	34.16	34.00	34.30	34.63
	150	—	35.03	34.27	34.40	34.60	34.36
	200	—	—	34.02	34.15	—	—
	300	—	—	—	—	—	—
	400	—	—	—	—	—	—
	Botm.	34.05	34.02	—	—	—	—
Sounding (m)		70	162	—	—	—	—
Transp. (m)		13	21	19	20	—	—
Color		3	3	3	3	—	—
Wave		1	1	3	2	2	3
Swell		1	1	2	2	2	1
Air Temp. (°C)		25	26	28	28	26	26
Air Press. (mm)		758.5	759	759	759	758.5	758
Wind		NW. 1	S. 1	SE. 2	SE. 2	NW. 2	N. 2
Cloud		Cc. 9	Cc. 8	Ci. 4	Ci. 4	Ci. 5	Ci. 2
Weather		C	C	BC	BC	BC	B

Date		② August 1961					
Station Number		04	05	06	07	08	09
Day		23	23	23	23	23	23
Item	Time / Z(m)	1610	1445	1238	0955	0739	0525
T °C	0	25.20	27.80	29.10	28.20	28.10	27.90
	10	20.25	25.85	27.82	28.09	28.05	27.91
	25	13.24	17.79	20.55	17.92	23.72	24.68
	50	7.98	11.99	14.12	17.31	18.05	19.18
	100	—	7.38	9.29	5.75	14.18	14.61
	150	—	—	4.45	3.85	4.99	4.95
	200	—	—	2.51	3.05	—	—
	300	—	—	—	—	—	—
	400	—	—	—	—	—	—
	Botm.	4.06	1.32	—	—	—	—
S ‰	0	32.74	30.61	31.49	31.67	31.33	31.00
	10	33.35	33.53	31.42	31.67	31.76	30.97
	25	34.04	34.05	33.30	32.61	32.92	32.18
	50	34.04	33.96	33.42	33.89	34.42	33.96
	100	—	34.05	34.15	34.11	34.34	34.18
	150	—	—	33.89	34.05	34.05	34.05
	200	—	—	33.89	33.98	—	—
	300	—	—	—	—	—	—
	400	—	—	—	—	—	—
	Botm.	33.89	33.86	—	—	—	—
Sounding (m)		68	160	—	—	—	—
Transp. (m)		15	16	16	21	21	—
Color		3	3	3	3	3	—
Wave		3	3	1	3	3	2
Swell		2	2	2	2	2	2
Air Temp. (°C)		28.0	30.0	29.5	29.6	29.0	28.8
Air Press. (mm)		755.6	756	756.7	757	757	756.2
Wind		S. 4	SSW. 2	S. 2	SW. 2	E. 2	E. 3
Cloud		Cs. 5	St. 4	St. 6	St. 6	Cs. 6	Cc. 3
Weather		BC	BC	BC	BC	BC	BC

		③ September 1961					
10	11	04	05	06	07	08	09
23	23	8	8	8	8	8	8
0320	0103	1100	1210	1405	1626	1905	2140
27.70	27.70	22.80	23.30	24.80	25.10	24.40	24.80
27.62	28.21	22.65	22.76	24.48	24.60	24.12	24.72
26.35	24.85	22.50	22.60	24.10	24.23	23.66	24.40
19.10	18.65	18.72	17.13	17.23	18.10	19.93	24.20
16.32	15.72	—	4.92	11.10	14.89	17.25	17.45
—	—	—	1.49	3.62	3.41	2.98	3.68
—	—	—	—	1.58	1.30	1.25	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	5.18	1.08	—	—	—	—
31.24	31.42	32.23	32.54	33.78	33.78	33.62	33.87
31.42	31.87	32.29	32.56	33.96	33.78	33.60	33.96
31.87	33.19	32.56	32.74	33.87	33.78	33.64	33.87
34.13	34.15	33.60	33.78	33.98	33.42	34.22	33.93
34.47	34.51	—	34.13	34.42	34.58	34.67	34.78
—	—	—	34.16	34.13	34.27	34.13	34.13
—	—	—	—	34.13	34.04	34.18	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	34.31	34.07	—	—	—	—
—	—	70	155	—	—	—	—
—	—	8	9	23	23	—	—
—	—	5	4	3	3	—	—
2	3	3	3	4	3	—	—
2	2	1	1	1	1	1	1
28.5	28.5	22.3	22.7	22.5	22.0	21.0	20.8
756.5	757.4	764.5	764.5	764.0	764.0	764.0	764.5
E. 3	NE. 2	NW. 3	N. 3	E. 4	E. 3	NE. 4	NE. 4
Cc. 4	Ci. 7	Cc. 3	Cc. 4	Ci. 2	Ci. 1	—	—
BC	BC	BC	BC	B	B	BC	BC

Date		④ October 1961					
Station Number		04	05	06	07	08	09
Day		22	22	22	22	22	22
Item	Time / Z(m)	1215	1118	1000	0808	0520	0230
T °C	0	22.10	22.40	22.60	23.00	23.10	23.00
	10	21.85	21.85	22.25	22.75	22.98	23.02
	25	21.72	21.65	21.85	22.20	22.95	22.92
	50	20.12	19.92	18.85	22.85	22.96	22.05
	100	—	3.35	8.19	16.53	16.25	18.35
	150	—	1.38	5.15	10.15	11.52	17.55
	200	—	—	2.52	5.38	—	—
	300	—	—	—	—	—	—
	400	—	—	—	—	—	—
	Botm.	7.15	0.77	—	—	—	—
S ‰	0	33.01	33.03	33.03	33.55	33.44	33.98
	10	32.97	33.03	34.01	33.48	33.48	33.80
	25	32.94	33.03	34.01	33.64	33.48	33.82
	50	33.35	33.37	33.73	33.82	33.57	33.91
	100	—	34.09	34.27	34.45	34.45	34.45
	150	—	34.07	34.16	34.09	34.42	34.52
	200	—	—	34.07	34.07	—	—
	300	—	—	—	—	—	—
	400	—	—	—	—	—	—
	Botm.	34.09	34.07	—	—	—	—
Sounding (m)		70	162	—	—	—	—
Transp. (m)		11	12	15	14	—	—
Color		6	6	6	6	—	—
Wave		4	4	4	4	—	—
Swell		3	3	3	3	—	—
Air Temp. (°C)		21.2	21.2	21.2	20.2	19.0	18.9
Air Press. (mm)		—	—	—	—	—	—
Wind		NW. 4	NW. 3	E. 3	E. 3	E. 3	E. 4
Cloud		Cs. 7	St. 7	Cs. 7	Cc. 6	Cs. 3	St. 2
Weather		BC	BC	BC	BC	BC	B

⑤ December 1961					
04	05	06	07	08	09
16	16	16	16	13	12
1304	1403	1602	1718	0032	2124
15. 50	16. 20	17. 40	17. 50	17. 90	18. 50
18. 18	16. 55	17. 14	17. 47	17. 60	17. 86
14. 95	16. 30	17. 19	17. 42	17. 58	18. 39
14. 53	15. 90	17. 18	17. 49	17. 55	18. 38
—	14. 93	17. 15	17. 35	17. 44	18. 33
—	3. 30	6. 74	6. 35	6. 15	13. 42
—	—	1. 45	1. 62	—	—
—	—	—	—	—	—
—	—	—	—	—	—
13. 49	1. 33	—	—	—	—
34. 33	34. 51	34. 34	34. 42	34. 09	34. 42
34. 33	34. 40	34. 36	34. 34	34. 16	34. 42
34. 33	34. 16	34. 38	34. 33	34. 15	34. 69
34. 51	34. 24	34. 33	34. 33	34. 11	34. 34
—	34. 51	34. 33	34. 33	34. 15	34. 47
—	34. 22	34. 33	34. 33	34. 16	34. 33
—	—	—	34. 07	—	—
—	—	—	—	—	—
—	—	—	—	—	—
34. 24	34. 15	—	—	—	—
70	160	—	—	—	—
5	9	7	9	—	—
3	3	3	3	—	—
2	2	2	2	4	5
2	2	2	2	3	2
8. 50	9. 01	10. 08	11. 00	—	17. 90
769	769	769. 5	769. 5	760	759
NE. 3	NE. 2	E. 1	ENE. 1	SW. 4	SSW. 4
Sc. 10	Sc. 10	Sc. 10	Sc. 10	—	—
C	C	C	C	C	R

B. 208선 해양관측성적

Oceanographic Data, Line 208

Date		① March 1961					
Station Number		01	02	03	04	05	06
Day		10	10	10	10	10	10
Item	Time / Z(m)	0703	0805	0925	1058	1240	1346
T °C	0	11.05	12.05	13.01	13.02	13.06	13.01
	10	—	—	13.11	13.23	13.21	12.81
	25	11.23	13.21	13.38	13.24	13.22	13.21
	50	—	13.28	12.73	13.30	13.20	12.82
	100	—	12.80	12.59	13.25	12.82	12.78
	150	—	12.42	—	—	12.68	12.78
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	11.10	9.45	12.24	12.15	12.02	12.31
S ‰	0	34.45	34.72	34.74	34.72	34.67	34.81
	10	34.47	—	34.65	34.69	34.67	34.72
	25	34.51	34.61	34.74	34.78	34.63	34.70
	50	—	34.72	34.63	34.82	34.60	34.54
	100	—	34.63	34.69	34.70	34.72	34.70
	150	—	34.63	34.63	34.72	34.78	34.67
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	34.43	34.63		34.63	34.60	34.54
Sounding (m)		59	125	150	155	155	130
Transp. (m)		4	9	12	16	16.2	6
Color		6	5	4	4	4	5
Wave		3	3	3	3	4	2
Swell		1	2	2	2	2	1
Air Temp. (°C)		2.5	—	—	5.5	6.5	6
Air Press. (mm)		770	769.5	771	771	770	770
Wind		N. 2	N. 3	NE. 4	N. 4	NE. 2	NE. 2
Cloud		0	0	Sc. 1	As. 1	Ns. 2	St. 7
Weather		B	B	B	B	B	BC

② June 1961

01	02	03	04	05	06	07	08	09	10
18	18	18	18	18	18	18	18	18	18
0110	0215	0410	0555	0748	0935	1205	1420	1710	1845
17.00	18.40	19.10	19.50	19.60	19.70	19.50	20.00	20.50	17.00
16.21	18.00	18.02	18.69	18.90	19.43	19.04	18.90	17.62	14.78
14.51	14.62	16.43	18.49	18.29	19.04	18.42	17.40	18.50	10.90
13.15	14.62	15.49	16.81	17.01	16.29	17.90	15.04	6.12	5.29
—	14.30	15.20	15.88	16.13	15.10	16.63	14.82	3.02	—
—	9.54	14.91	15.02	15.03	14.97	15.54	14.73	2.29	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
11.32	—	5.19	12.95	15.00	14.92	15.04	6.72	1.98	3.43
33.86	33.48	33.44	33.82	33.72	34.11	33.82	33.82	33.78	34.18
33.86	33.44	—	33.82	33.82	34.15	33.82	33.91	33.68	34.25
34.31	33.96	—	33.91	33.82	34.11	33.78	33.11	33.68	34.36
—	34.25	33.95	34.43	34.22	34.52	34.27	34.52	34.27	34.18
—	34.43	34.40	34.52	34.43	34.60	34.47	34.61	34.11	34.00
—	34.22	34.40	34.60	34.61	—	34.60	34.52	34.00	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
34.22	33.96	34.22	34.56	34.60	—	34.63	34.25	34.00	—
70	125	150	140	137	140	140	140	165	—
—	—	—	16	17	24	17	17	14	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
1	1	1	1	1	1	1	1	1	—
18.5	18.5	19.0	21	20.5	21.5	22.5	23.5	23.5	19.5
763	763	763	764	764	765	765	765	765	—
NE. 3	NE. 3	NE. 4	NE. 4	NE. 4	NE. 4	NE. 4	E. 4	NW. 2	NW. 3
—	—	Ci. 8	Cc. 9	Ci. 5	Ci. 5	Ci. 6	Ci. 5	Ci. 4	Ci. 5
—	—	C	C	BC	BC	BC	BC	BC	BC

Date		③ July 1961						
Station Number		01	02	03	04	05	06	07
Day		24	24	24	24	24	24	24
Item	Time / Z(m)	0735	0910	1040	1230	1420	1634	1825
T °C	0	19.00	27.50	27.40	28.00	26.80	26.80	26.80
	10	16.80	17.88	26.03	24.50	25.32	26.75	26.25
	25	9.94	15.16	25.08	21.20	23.24	26.22	22.80
	50	4.25	15.10	16.50	20.10	19.18	20.70	19.38
	100	—	15.02	15.14	17.30	18.95	17.54	16.88
	150	—	7.86	15.28	17.11	17.20	15.08	15.60
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	3.25	6.33	15.50	16.30	11.74	7.32	14.26
S ‰	0	32.95	29.34	27.76	31.42	30.63	32.48	31.76
	10	34.33	32.43	33.62	33.33	32.74	—	31.69
	25	34.40	32.17	32.21	32.03	32.36	32.47	32.65
	50	34.16	34.05	34.33	33.95	33.68	33.55	33.89
	100	—	34.43	34.33	34.25	34.51	34.24	34.38
	150	—	34.13	34.56	34.42	34.42	34.60	33.80
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	33.26	—	27.86	34.49	34.81	34.42	34.05
Sounding (m)		72	120	148	140	140	130	127
Transp. (m)		9	15	22	15	18	19	19
Color		4	3	3	3	2	3	2
Wave		4	5	4	4	4	4	3
Swell		2	3	3	2	2	2	2
Air Temp. (°C)		18	30	29	29.5	29.2	30	29.8
Air Press. (mm)		754	755	755.5	754	755	753	753.5
Wind		S. 3	S. 4	S. 3	S. 3	S. 2	S. 4	S. 3
Cloud		Ci. 10	Ci. 8	Cc. 4	Ac. 5	Ac. 6	Ac. 3	Ac. 3
Weather		C	C	BC	BC	BC	BC	BC

			④ August 1961						
08	09	10	01	02	03	04	05	06	07
24	24	24	24	24	24	24	24	24	24
1956	2145	2310	0356	0533	0711	0922	1132	1328	1500
27.20	27.00	27.70	24.60	24.30	27.60	28.20	28.00	29.50	29.00
26.01	27.08	27.10	15.38	14.15	26.24	28.08	27.75	28.28	28.75
23.04	25.25	24.31	12.52	12.92	16.70	24.05	23.28	26.38	25.72
18.44	19.18	20.29	8.65	10.97	15.58	17.41	19.41	19.53	19.05
17.02	17.20	16.58	—	5.13	15.12	17.39	18.02	17.18	17.07
15.85	14.02	15.28	—	4.56	8.41	16.38	16.79	16.78	16.72
—	—	—	—	—	—	—	—	—	16.72
—	—	—	—	—	—	—	—	—	—
6.50	3.30	7.20	5.89	2.36	2.91	8.78	11.38	13.98	16.45
31.94	30.79	30.91	30.90	31.22	30.46	30.46	31.09	30.73	32.00
31.96	30.79	—	33.53	33.53	30.81	30.55	31.09	30.72	31.96
—	32.16	—	34.27	34.24	32.68	31.71	32.07	32.86	32.92
33.24	33.19	—	34.29	34.38	33.95	34.11	32.34	34.52	34.52
34.51	—	—	—	34.18	34.42	34.38	34.49	34.58	34.43
34.51	34.43	—	—	34.09	34.31	34.54	34.61	34.61	34.39
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
33.21	3418	—	34.20	34.11	34.11	34.36	34.38	34.47	34.58
132	140	160	75	120	140	158	136	123	127
—	—	—	—	—	16	16	17	20	16
—	—	—	—	—	—	—	—	—	—
4	4	6	3	4	4	4	3	4	4
2	2	3	2	2	2	2	2	2	2
29.5	29.5	29.6	26.0	26.5	29.2	29.0	30.0	30.5	30.1
753	753	753	755.4	754.6	755.1	756	756.5	753.1	756
SE.4	SE.5	S.6	S.3	SSW.4	S.4	SW.4	SW.4	SW.4	SW.4
Ac.4	Ci.3	Ci.3	Ci.3	Ci.4	Ci.4	Cc.7	Cs.5	Cs.5	St.7
BC	BC	BC	BC	BC	BC	BC	BC	BC	BC

Date		⑤ October 1961								
Station Number		01	02	03	04	05	06	07	01	02
Day		22	22	22	22	22	22	22	7	7
Item	Time / Z(m)	1510	1616	1740	1930	2055	2250	2350	0740	0850
T °C	0	22.30	22.50	22.80	23.50	22.90	23.00	22.80	19.40	22.70
	10	22.03	22.45	22.75	23.45	22.65	22.98	22.55	19.63	22.11
	25	21.68	22.98	25.45	23.12	22.55	23.00	22.48	19.62	22.10
	50	8.15	22.08	21.65	21.70	20.68	21.75	20.55	14.57	22.06
	75	—	12.45	16.53	18.05	17.41	17.75	18.75	—	16.62
	100	—	8.25	15.12	16.55	16.48	17.60	17.42	—	9.50
	200	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—
	Botm.	6.13	3.45	5.32	10.62	14.25	16.75	16.65	11.70	2.96
S ‰	0	32.94	33.12	33.30	33.91	33.73	33.91	33.77	33.24	34.15
	10	33.01	33.12	33.30	33.93	33.73	33.82	33.82	33.24	34.15
	25	33.01	33.37	33.55	33.91	33.80	33.84	33.87	33.24	34.11
	50	34.09	33.22	33.64	34.00	33.73	33.84	33.98	—	34.09
	75	—	33.48	33.64	34.52	33.95	34.18	—	—	34.11
	100	—	34.24	34.52	34.60	34.18	34.52	34.60	—	34.29
	200	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—
	Botm.	34.16	34.09	34.18	34.36	34.45	34.52	34.58	34.07	33.91
Sounding (m)		68	120	143	150	138	125	130	70	123
Transp. (m)		14	15	—	—	—	—	—	13	18
Color		5	5	—	—	—	—	—	—	—
Wave		3	4	4	4	4	4	4	1	1
Swell		2	3	3	3	3	3	3	0	0
Air Temp. (°C)		22.1	22.1	21.4	21.5	21.7	20.8	21.4	14.50	16.40
Air Press. (mm)		—	—	—	—	—	—	—	770	771
Wind		NE. 3	NE. 3	NE. 3	NE. 4	NE. 4	NE. 4	NE. 4	NW. 2	NW. 2
Cloud		Cc. 6	Cc. 7	St. 7	St. 5	Cc. 6	St. 4	Ci. 9	0	0
Weather		BC	BC	BC	BC	BC	BC	BC	B	B

⑥ November 1961					⑦ December 1961									
03	04	05	06	07	01	02	03	04	05	06	07	08	09	10
7	7	7	7	7	12	12	12	12	12	12	12	12	12	12
1015	1140	1310	1440	1610	0711	0820	0948	1114	1249	1420	1555	1656	1805	1917
22.70	22.50	22.30	21.00	20.80	14.80	16.90	18.50	18.50	18.49	18.51	18.62	18.70	18.50	18.20
22.20	22.28	21.89	20.74	20.50	14.35	16.05	18.32	18.31	18.29	18.50	18.60	18.66	18.55	18.50
22.20	24.74	21.70	21.33	20.57	14.84	16.45	18.21	18.38	18.26	18.48	18.56	18.56	18.52	18.42
22.19	22.28	21.52	20.90	20.19	14.39	16.85	17.73	18.32	18.24	18.45	18.43	18.70	18.50	18.51
22.17	22.82	21.41	20.78	18.83	—	8.47	15.76	18.23	18.29	18.33	18.45	18.67	18.46	18.38
16.52	17.25	17.50	16.40	17.05	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5.02	13.73	11.10	13.85	14.86	12.28	5.86	6.35	14.25	15.77	18.11	18.36	18.29	15.45	10.91
34.22	34.20	—	33.93	33.95	34.05	34.24	34.34	34.45	34.52	34.60	—	34.67	34.56	34.56
34.15	34.20	34.02	33.68	33.87	33.96	34.05	34.51	34.43	34.47	34.47	34.51	34.63	—	34.51
34.16	34.13	34.02	33.77	33.02	34.33	34.11	34.43	34.34	34.60	34.58	34.51	34.58	—	34.69
34.11	34.11	34.02	33.77	33.80	34.49	34.94	34.25	34.33	34.42	34.47	34.54	34.63	—	34.51
34.11	34.11	33.95	33.86	33.86	—	34.40	34.58	34.42	34.52	34.76	34.67	34.51	—	34.76
34.27	34.36	34.38	34.02	34.27	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
34.00	34.22	34.15	34.27	34.29	34.51	34.47	34.25	34.49	34.51	34.51	—	34.60	34.42	34.42
137	147	160	133	127	72	123	150	154	144	136	156	127	132	140
19	16	19	17	18	7	11	10	16	10	9	12	10	—	—
—	—	—	—	—	3	3	3	3	3	3	3	3	—	—
1	1	1	1	1	1	1	2	2	3	3	4	3	3	3
0	0	0	0	0	1	1	1	1	1	2	2	2	2	2
18.80	18.20	18.0	17.9	17.6	11.00	14.00	16.50	18.0	18.30	18.30	18.50	18.00	17.00	17.80
758	777	770	770	770	769	768.5	768	768	760	760	760	760	760	760
NW. 2	NW. 2	NW. 2	NW. 2	NW. 2	NW. 1	NW. 1	W. 1	W. 2	SW. 3	SW. 4	SW. 4	SW. 3	SW. 3	SW. 2
0	0	0	Cs. 6	Cs. 5	Cc. 6	Cc. 2	Cc. 4	Cc. 2	Cs. 6	Cs. 6	Cs. 7	Cs. 7	Cs. 7	—
B	B	B	BC	BC	BC	B	BC	B	BC	BC	BC	BC	BC	—

C. 207선 해양관측성적

Oceanographic Data, Line 207

Date		① January 1961								
Station Number		01	02	03	04	05	S_1 34°58′ 129°23′	S_2 35°08′ 129°25′	S_3 35°17′ 129°25′	S_4 35°21′ 129°27′
Day		29	29	29	29	29	29	29	29	29
Item	Time / Z(m)	0740	0855	0950	1055	1150	1335	1430	1536	1635
T °C	0	12.60	12.50	14.00	13.00	13.50	12.50	13.00	13.00	13.50
	10	12.30	13.47	14.80	14.10	14.10	13.90	13.20	12.50	12.90
	25	12.29	13.43	13.81	14.17	14.20	13.95	13.24	12.60	13.15
	50	12.03	12.99	13.57	14.13	14.15	13.71	13.26	12.42	12.02
	100	—	—	13.03	13.57	13.81	13.08	—	—	—
	150	—	—	—	12.19	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—
	Botm.	11.85	12.70	13.00	12.50	12.55	12.80	12.00	10.29	10.89
S ‰	0	34.65	34.54	34.78	34.65	34.67	34.63	34.65	34.54	34.81
	10	34.52	28.15	34.74	34.74	34.56	34.16	34.60	34.52	34.87
	25	34.49	29.87	34.65	34.69	34.69	34.65	34.54	34.52	34.60
	50	34.61	34.51	34.69	34.60	34.61	34.56	34.56	34.52	34.52
	100	—	—	34.58	34.68	34.78	34.56	—	—	—
	150	—	—	—	34.56	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—
	Botm.	34.47	34.81	34.54	34.22	34.70	34.56	34.56	34.33	34.34
Sounding (m)		84	102	122	197	150	120	110	94	82
Transp. (m)		10.3	13.5	16	16.3	16.5	16.5	12.5	9.5	9.5
Color		4	4	3	3	—	3	4	4	4
Wave		2	2	2	2	2	2	3	3	3
Swell		1	1	2	2	2	2	2	2	2
Air Temp. (°C)		7.2	7.9	7.9	8.9	8.9	9	9.3	9.5	9.7
Air Press. (mm)		765	765	765	764	763	765	762	762	762
Wind		N. 3	NNE. 3	NW. 4	NW. 4	NW. 4	NW. 4	NE. 4	NE. 4	NE. 4
Cloud		Sc. 10	Sc. 9	Sc. 8	Sc. 8	Sc. 7	Sc. 8	Sc. 9	Sc. 8	Sc. 10
Weather		C	C	C	C	BC	C	C	C	C

② March 1961

01	02	03	04	05	S_1 34°58′ 129°23′	S_2 35°08′ 129°25′	S_3 35°17′ 129°25′
9	9	9	9	9	9	9	9
1035	1155	1314	1420	1525	1724	1830	1945
11.50	12.20	14.40	14.50	14.30	14.04	14.02	14.01
11.65	13.65	14.10	14.18	13.92	14.18	12.98	12.92
12.83	13.09	14.14	14.11	14.09	14.11	14.08	13.53
11.76	12.68	13.98	14.10	14.12	14.06	14.78	11.93
—	—	13.20	1408	1608	12.33	—	—
—	—	12.19	14.08	14.08	12.33	—	—
—	—	—	13.10	—	—	—	—
—	—	—	—	—	—	—	—
11.78	12.00	11.08	10.98	14.07	10.77	10.66	11.07
34.72	34.65	34.72	34.65	34.69	34.69	34.65	34.58
34.54	34.65	34.76	34.92	34.69	34.60	34.60	34.61
34.52	34.65	—	34.60	34.67	34.69	34.87	34.63
34.54	34.81	34.63	34.69	—	34.63	34.60	34.52
—	—	34.72	3461	3463	3469	—	—
—	—	34.61	34.91	34.63	34.58	34.51	—
—	—	—	34.72	—	34.54	—	—
—	—	—	—	—	—	—	—
34.54	34.60	34.52	—	34.67	3467	3469	34.58
85	108	145	211	130	160	110	100
9	11	19	4	16.2	8	—	—
5	5	4	4	3	4	—	—
2	2	3	3	3	2	4	3
1	2	2	2	2	2	2	2
6	6	4	6.7	6.8	7.5	—	4.5
770	770	770	769	767	768	769.5	769.5
E. 3	NE. 3	NE. 3	NE. 3	N. 3	NE. 2	NE. 3	NE. 4
0	0	Sc. 1	Sc. 1	Sc. 1	Sc. 4	Sc. 5	St. 4
B	B	B	B	B	BC	BC	BC

Date		③ June 1961							
Station Number		01	02	03	04	05	S_1 34°58′ 129°23′	S_2 35°08′ 129°25′	S_3 35°17′ 129°25′
Day		17	17	17	17	17	17	17	17
Item	Time / Z(m)	1400	1510	1623	1745	1958	2040	2230	2456
T °C	0	19.00	18.20	24.80	22.50	21.0	21.70	20.00	18.20
	10	17.10	17.70	19.10	19.50	20.10	18.10	18.85	17.10
	25	16.10	16.72	—	18.80	19.8	17.60	15.9	15.51
	50	14.90	15.34	14.80	16.20	19.70	14.60	14.92	15.20
	~~100~~	—	14.42	14.70	15.01	17.70	14.80	14.12	13.54
	100	—	—	14.60	14.80	15.80	14.60	—	—
	~~200~~	—	—	—	14.60	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	14.53	14.52	14.51	7.60	15.80	11.90	12.10	5.64
S ‰	0	33.77	33.93	33.93	33.91	33.89	—	33.75	33.78
	10	33.78	33.69	33.77	33.80	33.95	33.59	33.69	33.37
	25	33.96	33.84	33.66	33.95	33.86	33.66	33.62	33.78
	50	34.11	34.11	34.22	34.15	33.89	34.04	34.43	34.11
	~~100~~	—	34.18	34.36	34.22	34.04	34.33	34.31	33.89
	100	—	—	34.40	34.43	34.36	34.47	—	—
	~~200~~	—	—	—	34.40	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	34.13	34.22	34.40	34.25	34.74	34.31	34.36	34.25
Sounding (m)		83	105	120	220	160	145	110	100
Transp. (m)		7	8	25	21	—	—	—	—
Color		6	4	1	1	—	—	—	—
Wave		2	2	1	2	2	—	—	—
Swell		1	1	1	1	1	—	—	1
Air Temp. (°C)		26	25.5	25.1	22.8	22	21.5	20.6	19.5
Air Press. (mm)		760	760	760	760	760.5	761	762	763
Wind		S. 2	S. 2	S. 2	S. 2	S. 2	—	—	NW. 3
Cloud		Cu. 1	Cu. 1	Cu. 2	Cu. 4	Cu. 4	4	—	—
Weather		B	B	B	BC	BC	BC	—	—

④ July 1961

01	02	03	04	05	S_1 34°58′ 129°23′	S_2 35°08′ 129°25′	S_3 35°17′ 129°25′
22	22	22	22	22	23	23	23
1513	1720	1847	1920	2140	0007	0153	0445
20.80	21.50	23.50	22.00	22.60	19.80	19.50	19.40
19.37	20.02	22.94	23.84	23.20	20.18	17.34	17.38
16.65	15.30	18.90	19.00	23.32	17.30	16.05	15.20
14.52	14.94	15.32	18.90	16.64	16.01	14.30	11.68
—	14.58	14.78	16.92	15.90	14.82	12.80	11.42
—	—	—	15.18	14.40	14.80	12.02	11.20
—	—	—	15.01	14.25	—	—	—
—	—	—	—	—	—	—	—
12.15	14.36	10.70	13.88	11.64	11.86	11.59	10.78
—	30.17	27.97	28.15	31.13	28.62	30.82	—
32.72	31.92	—	—	31.91	33.86	32.05	33.19
32.99	33.08	—	—	32.99	32.57	33.35	34.94
34.07	33.22	34.18	33.62	33.71	31.18	34.09	34.45
—	—	33.86	34.29	34.13	34.45	34.42	34.33
—	—	—	34.42	34.13	34.38	—	34.07
—	—	—	34.34	34.38	—	—	—
—	—	—	—	—	—	—	—
—	34.18	34.31	34.20	34.20	34.42	34.13	34.36
80	106	127	226	157	128	115	109
12	16	15	—	—	—	—	—
4	3	3	—	—	—	—	—
2	1	2	3	3	2	2	1
1	1	1	1	1	2	1	1
30.05	30.01	31.0	29.5	29.5	29.0	29.0	29.0
754	754	754	757	757	756	756	757
SE. 2	SE. 2	SE. 2	S. 4	SE. 3	SE. 3	SW. 2	SW. 1
Cc. 3	Cc. 6	Cs. 8	—	—	—	—	Cc. 10
BC	BC	C	BC	B	B	B	C

Date		⑤ August 1961					
Station Number		01	02	03	04	05	S_1 34°56′ 129°23′
Day		25	25	25	25	24	24
Item	Time / Z(m)	0430	0325	0201	0030	2332	2115
T °C	0	27.80	28.00	28.50	28.70	28.80	29.00
	10	26.67	25.82	27.42	26.86	28.95	28.22
	25	16.18	18.85	21.81	18.83	20.78	27.68
	50	14.62	17.38	17.55	16.85	17.85	18.78
	~~100~~	—	—	—	—	—	—
	150	—	—	7.98	7.83	15.28	—
	~~200~~	—	—	—	4.78	—	—
	300	—	—	—	—	—	—
	Botm.	6.52	7.08	5.12	2.51	4.81	17.82
S ‰	0	30.35	29.98	29.74	29.81	30.17	30.88
	10	31.42	31.08	30.95	31.40	34.34	31.06
	25	33.19	32.25	32.34	33.55	30.39	31.60
	50	34.33	34.40	34.33	33.46	32.85	33.51
	~~100~~	—	—	—	—	—	—
	150	—	—	33.60	34.52	33.95	—
	~~200~~	—	—	—	34.22	—	—
	300	—	—	—	—	—	—
	Botm.	34.18	34.42	34.15	33.98	34.54	34.18
Sounding (m)		90	102	128	226	152	—
Transp. (m)		—	—	—	—	—	—
Color		—	—	—	—	—	—
Wave		3	2	3	2	3	4
Swell		2	2	2	1	2	2
Air Temp. (°C)		29.3	29.5	29.5	30.0	30.0	30.0
Air Press. (mm)		757	765	756.7	757	757	756.5
Wind		S. 2	SW. 2	SW. 2	S. 2	S. 2	S. 2
Cloud		Cc. 4	Ci. 4	Ci. 6	Ci. 5	Ci. 5	St. 4
Weather		BC	BC	BC	BC	BC	BC

			⑥ October 1961				
S_2 35°08′ 129°25′	S_3 35°17′ 129°25′	S_4 35°21′ 129°27′	01	02	03	04	05
24	24	24	23	23	23	23	23
1955	1845	1718	1043	0925	0834	0735	0700
29. 10	28. 80	28. 80	22. 40	23. 00	22. 80	23. 70	23. 40
28. 61	25. 61	28. 09	22. 50	23. 05	22. 58	23. 32	23. 23
26. 65	25. 01	23. 28	21. 62	22. 78	22. 48	23. 31	23. 15
19. 09	20. 18	19. 15	19. 29	16. 32	19. 09	22. 08	22. 15
—	—	18. 20	—	—	15. 62	16. 48	16. 98
—	16. 45	16. 52	—	—	—	9. 52	—
—	—	—	—	—	—	4. 08	—
—	—	—	—	—	—	—	—
16. 18	16. 28	16. 47	11. 05	8. 53	6. 72	3. 98	9. 54
31. 60	30. 70	30. 48	32. 23	33. 64	33. 91	32. 56	33. 69
31. 73	30. 99	31. 02	32. 65	33. 64	33. 44	—	33. 64
32. 76	32. 57	32. 29	33. 84	33. 64	33. 48	—	33. 48
34. 27	34. 52	34. 18	33. 46	33. 39	33. 48	—	34. 00
—	—	34. 52	—	—	34. 61	—	34. 58
—	34. 52	34. 52	—	—	—	34. 36	—
—	—	—	—	—	—	34. 16	—
—	—	—	—	—	—	—	—
34. 42	34. 52	34. 54	34. 45	34. 27	34. 24	34. 13	—
106	129	120	88	102	130	221	153
—	—	—	6	15	19	20	17
—	—	—	5	4	5	5	5
3	3	2	3	3	3	3	4
2	2	1	2	2	2	2	3
30. 5	30. 8	30. 4	22. 0	19. 5	19. 2	19. 3	19. 2
757	755. 5	755. 7	—	—	—	—	—
SW. 2	SE. 2	S. 2	N. 3	N. 3	N. 3	N. 3	N. 3
St. 3	Ci. 6	St. 3	St. 2	St. 2	St. 4	Cc. 6	Cu. 6
BC	BC	BC	B	B	BC	BC	BC

Date		⑦ November 1961							
Station Number		01	02	03	04	05	S_1 34°58′ 129°23′	S_2 35°08′ 129°25′	S_3 35°17′ 129°25′
Day		5	6	6	6	6	6	6	6
Item	Time / Z(m)	1207	1220	1325	1435	1525	1645	1745	1900
T °C	0	19.60	20.50	23.00	23.40	23.30	23.00	20.30	19.00
	10	20.00	19.72	22.43	22.35	22.50	—	—	—
	25	19.86	21.52	22.42	22.42	22.46	—	—	—
	50	14.65	25.14	21.82	22.43	20.40	—	—	—
	100	—	—	16.62	18.08	—	—	—	—
	150	—	—	—	16.90	—	—	—	—
	200	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	14.21	15.74	17.91	7.84	19.38	—	—	—
S ‰	0	32.30	33.19	34.34	34.34	34.42	34.43	33.31	33.50
	10	33.19	33.19	34.34	34.25	—	—	—	—
	25	33.46	34.07	34.34	34.33	34.42	—	—	—
	50	34.18	34.07	34.16	34.33	34.42	—	—	—
	100	—	—	34.60	34.60	34.52	—	—	—
	150	—	—	—	34.60	—	—	—	—
	200	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	34.24	—	34.38	34.25	—	—	—	—
Sounding (m)		87	105	165	200	103	—	—	—
Transp. (m)		6	9	17	13.5	14	—	—	—
Color		—	—	—	—	—	—	—	—
Wave		1	3	3	3	3	—	—	—
Swell		2	2	2	2	2	—	—	—
Air Temp. (°C)		16.0	18.3	19.5	19.0	19.0	—	—	—
Air Press. (mm)		770.3	770	770	767	769	—	—	—
Wind		N. 1	NNE. 2	NNE. 3	NE. 3	NE. 3	—	—	—
Cloud		Cc. 3	Sc. 2	Sc. 3	Sc. 5	Sc. 5	—	—	—
Weather		BC	B	BC	BC	BC	—	—	—

⑧ December 1961

01	02	03	04	05	S_1 34°58′ 129°23′	S_2 35°08′ 129°25′	S_3 35°17′ 129°25′
11	11	11	11	11	11	11	11
0735	0833	0927	1032	1121	1248	1357	1513
16.30	17.01	17.40	18.50	18.56	18.50	17.80	16.50
15.91	16.92	16.91	19.64	18.51	18.20	17.20	16.00
15.95	16.38	16.71	18.31	18.48	18.14	16.75	15.77
15.78	16.56	15.32	17.89	18.39	17.20	15.98	—
—	—	16.80	17.79	18.39	—	—	—
—	—	—	15.49	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
16.11	14.32	10.11	8.17	15.78	15.07	14.53	13.57
34.05	34.24	34.15	34.40	34.42	34.42	34.24	—
33.96	34.15	34.13	34.43	34.34	34.33	34.20	33.98
34.00	34.07	34.05	34.42	34.34	34.42	34.09	34.05
34.22	34.52	34.60	34.42	34.38	34.22	34.00	34.60
—	—	34.60	34.34	34.34	—	—	—
—	—	—	34.60	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
34.60	34.33	34.42	34.47	34.49	34.54	34.60	34.60
83	100	122	224	113	121	113	97
7	7	10	12	—	11	13	8
3	3	3	3	—	3	3	3
2	2	2	3	3	3	3	3
1	1	1	1	2	2	2	2
12.3	13.2	14.6	16.0	14.2	13.8	14.5	16.2
767	768	768	768.5	769	768	767	767
W. 1	W. 1	W. 2	W. 2	W. 2	W. 2	W. 2	W. 3
0	0	0	0	0	0	0	0
B	B	B	B	B	B	B	B

D. 206선 해양관측성적

Oceanographic Data, Line 206

Date		① February 1961					
Station Number		02	03	S_1 34°25′ 128°58′	S_2 34°36′ 128°59′	S_3 34°45′ 128°59′	S_4 34°55′ 129°01′
Day		3	3	3	3	3	3
Item	Time / Z(m)	1215	1315	1405	1530	1655	1810
T °C	0	11.50	11.70	11.06	11.30	12.40	11.20
	10	13.23	12.54	13.40	12.80	11.90	—
	25	13.33	12.92	14.31	13.87	12.81	11.38
	50	13.15	12.81	13.46	13.99	12.71	—
	100	—	—	12.56	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	12.65	12.19	12.51	12.63	12.32	—
S ‰	0	34.67	34.79	34.69	34.79	34.60	34.69
	10	34.65	34.65	34.69	34.69	34.63	—
	25	34.63	34.63	34.81	34.72	34.58	34.54
	50	34.58	34.69	34.58	34.76	34.58	—
	100	—	—	34.49	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	34.56	34.45	34.51	34.51	34.45	—
Sounding (m)		75	105	115	105	100	80
Transp. (m)		16	16	16	16	—	—
Color		5	4	4	4	4	—
Wave		4	3	3	4	3	3
Swell		2	2	2	2	2	2
Air Temp. (°C)		—	—	—	—	—	—
Air Press. (mm)		—	—	—	—	—	—
Wind		NE. 4	NE. 4	NE. 4	NE. 4	NE. 4	NE. 2
Cloud		0	Cu. 1	0	Cu. 1	0	0
Weather		B	B	B	B	B	B

② March 1961

01	02	03	04	S_1 34°25′ 128°58′	S_2 34°35′ 128°59′	S_3 34°45′ 129°00′	S_4 34°55′ 129°00′
14	14	14	14	14	14	14	14
1420	1310	1155	1040	0900	1120	1000	0840
12.98	13.81	13.98	13.10	13.99	13.81	12.00	13.10
13.69	13.81	13.99	13.10	14.04	13.45	—	13.09
12.29	11.90	14.02	13.07	14.07	12.11	11.64	13.05
—	—	12.98	11.57	13.94	11.84	11.04	12.43
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
12.02	11.50	11.20	10.15	11.30	11.54	10.21	12.04
34.58	34.63	34.56	34.60	34.56	34.65	34.56	34.63
34.56	34.65	34.56	34.60	34.56	34.63	34.58	34.58
34.56	34.69	34.63	34.56	34.58	34.60	34.52	34.63
—	—	34.56	34.51	34.60	34.60	34.47	34.56
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
34.56	34.56	34.52	34.38	34.47	34.47	34.49	—
55	65	100	115	118	105	97	75
11	12	12	14	16	12	8	9
5	—	6	4	5	5	—	—
3	4	4	4	4	3	3	3
2	2	2	2	2	2	2	2
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
NE. 3	NE. 4	NE. 4	NE. 4	NE. 4	NE. 3	NE. 3	NE. 3
Cs. 2	Sc. 8	Sc. 9	Sc. 10	Ns. 6	St. 10	St. 10	St. 10
B	C	C	B	BC	C	C	C

Date		③ December 1961							
Station Number		01	02	03	04	S_1 34°25′ 128°58′	S_2 34°35′ 128°59′	S_3 34°35′ 129°00′	S_4 34°55′ 129°00′
Day		9	9	9	9	9	9	9	9
Item	Time / Z(m)	0640	0758	0930	1050	1205	1330	1457	1610
T °C	0	17.50	17.70	17.30	16.80	17.60	17.00	18.20	17.40
	10	17.37	18.02	16.86	16.50	16.41	16.83	17.85	17.09
	25	17.39	17.58	16.86	15.86	16.70	16.30	16.55	16.30
	50	17.71	17.91	16.44	15.50	15.77	16.71	16.97	16.05
	100	—	—	—	15.96	14.40	—	—	—
	150	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	16.59	16.74	14.51	12.75	13.87	15.53	15.99	15.85
S ‰	0	34.24	34.42	34.20	33.98	34.22	34.05	34.33	34.15
	10	34.25	34.29	34.09	—	34.13	34.05	34.24	—
	25	34.24	34.38	32.30	—	33.84	34.20	—	34.22
	50	34.31	34.31	31.64	—	33.98	34.69	34.51	33.98
	100	—	—	—	34.65	34.47	—	—	—
	150	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	34.25	34.40	34.05	34.54	34.75	34.69	34.67	34.24
Sounding (m)		70	77	118	123	110	100	97	78
Transp. (m)		—	—	—	9	21	22	20	8
Color		—	—	4	3	2	2	3	4
Wave		3	3	3	3	3	2	2	2
Swell		2	2	2	2	2	2	1	1
Air Temp. (°C)		9.0	9.8	11.0	11.0	12.2	9.8	11.4	11.8
Air Press. (mm)		771	771	771	772	773	772	772	772
Wind		N. 4	NNE. 3	N. 3	N. 3	N. 2	N. 1	N. 1	N. 1
Cloud		—	Ci. 2	Ci. 3	Ci. 2	0	0	0	0
Weather		B	B	BC	B	B	B	B	B

E. 205선 해 양 관 측 성 적

Oceanographic Data, Line 205

Date		① December 1961				
Station Number		01	02	03	04	05
Day		7	7	7	7	7
Item	Time / Z(m)	0735	0852	1014	1205	1357
T °C	0	14.20	14.80	17.50	18.00	19.80
	10	14.52	14.42	17.51	18.91	19.90
	25	14.68	14.71	17.58	18.92	20.16
	50	—	—	16.58	17.70	20.00
	100	—	—	—	—	—
	150	—	—	—	—	—
	200	—	—	—	—	—
	300	—	—	—	—	—
	Botm.	16.20	16.00	16.40	17.40	16.60
S ‰	0	33.66	33.77	34.20	34.33	34.67
	10	33.39	33.59	34.20	34.42	34.58
	25	33.40	34.27	34.27	34.33	34.56
	50	—	—	34.20	34.05	34.58
	100	—	—	—	—	—
	150	—	—	—	—	—
	200	—	—	—	—	—
	300	—	—	—	—	—
	Botm.	34.18	34.27	34.65	33.89	34.65
Sounding (m)		67	65	83	97	115
Transp. (m)		6	9	10	9	9
Color		4	3	3	3	3
Wave		4	5	4	5	6
Swell		2	2	2	3	3
Air Temp. (°C)		5.3	6.8	6.8	9.0	11.0
Air Press. (mm)		769.5	770	771	770	770
Wind		N. 5	N. 5	NW. 5	NW. 5	W. 7
Cloud		Cc. 2	Cc. 2	Cc. 2	Cc. 3	Cc. 6
Weather		B	B	B	BC	BC

F. 204선 해 양 관 측 성 적

Oceanographic Data, Line 204

Date		① December 1961									
Station Number		01	02	03	04	05	S_1 33°36′ 127°03′	S_2 33°21′ 126°58′	S_3 33°11′ 126°58′	S_4 33°08′ 126°39′	S_5 33°00′ 126°22′
Day		16	16	16	15	15	15	15	13	12	12
Item	Time / Z(m)	1205	1040	0920	1300	1135	0940	0700	0300	2345	2115
T °C	0	13.20	12.30	14.30	15.60	18.50	18.70	17.50	19.20	19.80	18.90
	10	13.15	12.18	14.05	15.25	18.51	18.88	17.48	19.05	19.82	18.97
	25	13.01	—	13.75	15.38	18.28	18.70	17.50	18.55	19.71	18.92
	50	—	—	—	15.42	18.22	18.67	17.68	18.48	19.31	18.25
	100	—	—	—	—	—	17.32	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	12.95	12.07	13.55	16.02	16.38	16.38	17.55	17.85	19.25	17.89
S ‰	0	33.24	33.15	33.66	33.95	34.56	34.45	34.38	34.38	34.38	34.38
	10	33.24	33.15	33.68	33.86	34.47	34.45	34.38	34.38	34.49	34.38
	25	33.24	—	33.68	33.89	34.45	34.45	34.36	34.38	34.47	34.38
	50	—	—	—	34.02	34.38	34.45	34.36	34.38	34.40	34.45
	100	—	—	—	—	—	34.51	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	33.24	33.15	33.59	34.60	34.65	34.65	34.36	34.38	34.56	34.45
Sounding (m)		34	30	42	80	98	128	102	108	101	102
Transp. (m)		3	2	2.5	10	10	9	9	—	—	—
Color		7	7	6	4	4	4	4	—	—	—
Wave		3	3	3	5	5	5	4	6	6	4
Swell		2	2	2	3	3	3	3	3	3	3
Air Temp. (°C)		8.0	7.7	6.8	5.3	4.8	4.8	6.0	14.1	17.5	17.7
Air Press. (mm)		769	769	770	771	773	763	772	764	762	762
Wind		N. 3	N. 3	N. 3	NW. 4	NW. 4	NW. 4	NE. 4	NW. 5	NW. 5	NW. 3
Cloud		Cs. 4	Ci. 4	St. 5	Cs. 8	Cs. 8	St. 7	St. 7	St. 4	Sc. 4	Ci. 3
Weather		BC	BC	BC	C	C	BC	BC	BC	BC	BC

G. 203선 해 양 관 측 성 적

Oceanographic Data, Line 203

Date		① June 1961				② December 1961					
Station Number		01	02	03	04	01	02	03	04	05	06
Day		9	9	9	8	12	12	12	12	12	12
Item	Time / Z(m)	1236	1100	0920	1615	0815	0945	1155	1405	1420	1900
T °C	0	16.00	17.10	18.00	18.40	14.40	14.70	17.40	17.60	17.90	18.60
	10	15.42	16.45	17.08	18.12	14.42	14.71	17.32	17.65	17.95	18.52
	25	13.43	15.42	16.22	16.52	14.35	14.68	17.08	17.56	17.72	18.37
	50	—	13.43	15.02	14.95	14.35	14.60	16.89	17.61	17.78	18.22
	100	—	—	14.35	14.33	—	—	16.80	—	17.72	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	12.89	13.04	14.33	14.22	14.15	14.55	16.78	17.55	17.73	18.13
S ‰	0	33.51	33.31	33.48	32.81	33.57	33.50	33.86	34.07	33.95	34.38
	10	33.57	33.31	33.48	32.81	33.50	33.59	33.86	34.11	34.02	34.38
	25	33.75	33.50	33.60	33.15	33.50	33.50	33.86	34.16	34.02	34.38
	50	—	33.78	34.38	33.84	33.59	33.50	33.77	34.38	33.95	34.47
	100	—	—	34.36	34.49	—	—	33.96	—	34.47	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	33.82	33.93	34.27	34.51	33.48	33.57	34.07	34.38	34.40	34.47
Sounding (m)		51	66	113	115	60	80	146	80	110	103
Transp. (m)		11	10	13	22	5	5	13	11	12	—
Color		4	4	4	3	5	5	4	4	4	—
Wave		3	3	3	3	4	4	4	4	4	4
Swell		2	2	2	2	2	2	2	2	2	3
Air Temp. (°C)		17.9	18.5	19.6	19.5	14.3	15.3	16.5	18.5	18.5	18.0
Air Press. (mm)		757	757	758	755	765	765	765	762	762	762
Wind		S. 2	S. 2	S. 2	S. 3	SE. 3	E. 3	E. 2	SE. 3	E. 2	NW. 3
Cloud		Cc. 10	Cu. 10	Cc. 10	Cu. 9	Cs. 6	Ci. 6	St. 7	St. 5	St. 5	St. 4
Weather		C	C	C	C	BC	BC	BC	BC	BC	BC

서 해 해 양 조 사 성 적

OCEANOGRAPHIC OBSERVATIONS

WESTERN WATERS

1 9 6 1

A. 312선 해 양 관 측 성 적

Oceanographic Data, Line 312

Date		② December 1961						
Station Number		01	02	03	04	05	06	07
Day		12	12	12	12	11	11	11
Item	Time / Z(m)	0600	0420	0230	0010	2240	2055	1900
T °C	0	14.10	14.10	13.90	13.60	13.70	14.10	14.20
	10	13.95	14.18	13.75	13.52	13.58	14.08	13.98
	25	13.89	14.15	13.52	13.41	13.45	13.65	13.81
	50	13.81	13.98	13.49	13.38	13.38	13.48	13.65
	100	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	13.75	13.65	13.13	13.12	12.65	13.15	12.15
S ‰	0	33.26	32.97	32.70	32.97	32.97	32.79	32.50
	10	32.70	33.06	32.76	32.94	32.97	32.72	32.47
	25	33.31	33.24	33.06	32.97	32.97	32.88	32.77
	50	33.39	33.13	33.06	32.97	33.08	33.04	32.88
	100	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	33.40	33.30	33.06	33.06	33.31	32.77	33.28
Sounding (m)		85	88	70	85	104	96	98
Transp. (m)		—	—	—	—	—	—	—
Color		—		—	—	—	—	—
Wave		4		4	4	4	4	4
Swell		2	2	2	2	2	2	2
Air Temp. (°C)		13.9	14.2	13.9	13.9	14.0	14.0	13.5
Air Press. (mm)		765	765	765	765	765	765	765
Wind		SW. 3	SE. 3	SE. 3	SE. 3	SE. 3	SE. 3	SW. 3
Cloud		St. 2	Ci. 3	St. 4	Cs. 4	Ci. 3	Ci. 3	Ci. 4
Weather		B	BC	BC	BC	BC	BC	BC

B. 311선 해 양 관 측 성 적

Oceanographic Data, Line 311

Date		① April 1961				
Station Number		01	02	03	04	05
Day		28	28	28	30	30
Item	Time / Z(m)	1340	1545	1728	0910	1030
T °C	0	13.00	11.70	12.12	12.10	11.80
	10	10.29	9.40	10.52	9.35	11.89
	25	8.35	9.08	9.75	8.23	10.20
	50	—	9.06	9.15	9.65	9.45
	100	—	—	—	—	—
	150	—	—	—	—	—
	200	—	—	—	—	—
	300	—	—	—	—	—
	Botm.	9.35	9.05	8.15	9.42	10.18
S ‰	0	33.15	32.99	33.12	33.22	33.57
	10	33.04	33.04	—	32.97	33.30
	25	32.88	32.95	33.30	32.97	33.46
	50	—	33.03	33.30	33.57	33.55
	100	—	—	—	—	—
	150	—	—	—	—	—
	200	—	—	—	—	—
	300	—	—	—	—	—
	Botm.	32.86	33.06	33.33	33.68	33.46
Sounding (m)		36	75	95	92	97
Transp. (m)		3	1.5	6.2	6	5
Color		6	11	6	5	5
Wave		1	1	2	3	3
Swell		1	1	1	2	2
Air Temp. (°C)		13.80	13.0	14.7	12.2	12.4
Air Press. (mm)		764	764	764	765	764
Wind		SW. 1	SW. 1	SW. 2	W. 1	W. 1
Cloud		Cs. 7	Cc. 7	Cc. 6	St. 9	Cs. 7
Weather		BC	BC	BC	C	BC

② June 1961				
01	02	03	04	S_1 34°54′ 125°31′
6	6	6	7	7
1455	1615	1800	0700	1310
18.80	16.00	17.40	17.70	18.70
15.32	14.35	14.72	17.61	18.55
13.83	13.18	13.35	14.49	13.13
—	13.08	13.13	11.42	12.75
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
13.32	13.02	12.22	11.35	12.70
33.60	32.62	33.62	33.66	32.61
33.69	33.60	33.64	33.62	33.06
33.69	33.60	33.73	33.77	33.50
—	33.60	33.77	33.04	33.51
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
33.60	33.66	33.96	34.04	33.55
36	82	94	95	56
5	4	7	16	12
4	6	4	3	4
3	3	3	3	3
1	1	1	2	1
20.6	19.4	19.5	18.5	20.5
761	760	760	760	762
S. 1	S. 1	S. 1	S. 2	S. 1
Ci. 6	Cu. 6	Ci. 6	St. 4	Cc. 6
BC	BC	BC	BC	BC

Date		③ December 1961					
Station Number		01	02	03	04	05	06
Day		10	10	11	11	11	11
Item	Time / Z(m)	1130	1300	1010	1220	1350	1900
T °C	0	12.40	13.70	13.40	13.70	13.80	14.20
	10	12.35	13.58	13.40	13 68	13.71	13.98
	25	12.28	13.47	13.35	13.62	13.67	13.81
	50	—	13.55	13.31	13.55	13.57	13.65
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	12.08	13.38	13.30	12.25	11.85	12.15
S ‰	0	32.54	32.79	32.97	32.79	32.52	—
	10	32.50	32.79	32.94	32.79	32.59	—
	25	32.50	32.79	32.95	32.77	32.61	—
	50	—	32.79	32.97	32.83	32.94	—
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	32.47	32.79	32.97	33.24	33.33	—
Sounding (m)		34	78	93	91	90	98
Transp. (m)		1	2	5	11	13	—
Color		8	7	5	5	4	—
Wave		4	4	3	4	4	4
Swell		3	3	2	2	2	2
Air Temp. (°C)		14.0	15.0	14.0	14.3	14.0	13.5
Air Press. (mm)		765	764	765	765	764.5	765
Wind		S. 3	S. 3	SW. 2	SW. 3	SW. 3	SW. 3
Cloud		Cs. 6	Cs. 4	St. 5	St. 3	St. 3	Ci. 4
Weather		BC	BC	BC	BC	BC	BC

C. 310선 해 양 관 측 성 적

Oceanographic Data, Line 310

Date		① May 1961							
Station Number		01	02	03	04	05	06	S_1 35°33′ 125°31′	S_2 35°39′ 125°48′
Day		1	1	1	1	1	1	1	1
Item	Time / Z(m)	0550	0710	0820	0245	1110	1230	1545	1710
T °C	0	12.30	12.30	12.30	12.30	12.40	12.10	12.30	12.30
	10	10.51	10.02	11.48	11.38	11.35	8.98	10.11	10.42
	25	—	—	7.95	7.73	7.85	7.45	7.68	8.01
	50	—	—	7.80	7.75	7.73	7.40	7.62	7.82
	100	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	10.55	9.92	7.81	7.79	7.68	7.38	7.60	7.78
S ‰	0	32.34	32.47	32.29	32.47	32.76	32.68	32.72	32.76
	10	32.59	32.45	32.36	32.50	32.65	32.66	33.04	32.66
	25	—	—	32.57	32.76	32.66	32.68	32.94	32.76
	50	—	—	32.57	32.76	32.68	32.68	32.76	32.81
	100	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	32.32	32.47	32.45	32.72	32.76	32.68	32.76	32.76
Sounding (m)		22	30	65	68	70	75	74	76
Transp. (m)		1	—	7	6	—	10	11	10
Color		10	10	5	5	5	5	5	5
Wave		5	5	4	2	3	3	3	3
Swell		3	3	2	2	2	2	2	2
Air Temp. (°C)		10.5	11.0	11.7	13.0	11.3	11.8	13.0	14.1
Air Press. (mm)		762	763	763	763	763	763	760	763
Wind		N. 1	N. 1	W. 1	W. 1	NW. 1	NW. 2	W. 2	NW. 1
Cloud		Cc. 7	Sc. 8	Sc. 8	Sc. 7	St. 6	St. 8	St. 7	St. 7
Weather		BC	C	C	BC	BC	C	BC	BC

Date		② June 1961				③ December 1961				
Station Number		01	02	03	S₁ 35°28′ 125°44′	01	02	03	04	05
Day		5	5	5	5	10	9	9	9	9
Item	Time / Z(m)	2510	2000	1850	1700	0130	2400	2235	2100	1930
T °C	0	18.00	18.40	18.50	17.70	13.00	13.30	13.50	13.40	13.30
	10	16.23	16.25	17.35	14.55	12.68	13.31	13.42	13.35	13.25
	25	—	12.75	12.15	13.51	—	12.85	13.28	13.01	12.98
	50	—	—	10.51	—	—	—	13.26	12.89	12.80
	100	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—
	Botm.	14.35	11.12	10.25	11.37	12.49	12.38	12.58	12.86	12.32
S ‰	0	32.27	32.68	32.99	32.27	32.66	32.86	32.79	32.88	32.86
	10	32.11	32.45	32.90	32.30	32.59	32.63	32.79	33.01	32.79
	25	—	32.45	32.81	32.27	—	32.63	32.79	33.01	32.81
	50	—	—	—	—	—	—	32.86	32.99	33.31
	100	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—
	Botm.	32.05	32.54	32.90	32.54	32.88	32.76	32.79	32.79	32.88
Sounding (m)		19	45	67	54	25	41	65	67	80
Transp. (m)		—	—	6	4	—	—	—	—	—
Color		—	—	—	—	—	—	—	—	—
Wave		3	3	3	3	5	4	4	4	4
Swell		1	1	1	1	3	3	3	3	3
Air Temp. (°C)		10.9	18.3	18.1	20.8	10.1	10.0	10.2	10.3	10.3
Air Press. (mm)		762	762	762	762	767	767	767	767	767.5
Wind		SE. 2	SE. 2	SE. 2	SE. 2	S. 4	S. 4	S. 4	S. 4	S. 4
Cloud		St. 2	St. 3	Ci. 3	St. 5	Cc. 4	St. 3	Ci. 3	St. 4	St. 4
Weather		B	BC	BC	BC	BC	BC	BC	BC	BC

D. 309선 해 양 관 측 성 적

Oceanographic Data, Line 309

Date		① April 1961			② May 1961					
Station Number		01	02	03	01	02	03	04	05	06
Day		30	30	30	2	2	2	2	2	2
Item	Time / Z(m)	1230	1445	1615	0555	0710	0830	1000	1120	1230
T °C	0	10.50	11.80	11.00	12.20	12.30	12.50	12.30	12.30	12.40
	10	8.40	8.90	9.90	9.65	9.15	9.69	10.05	9.95	10.15
	25	8.30	8.50	9.60	9.92	8.85	8.65	8.99	8.75	8.88
	50	—	—	—	—	—	—	8.45	7.85	7.55
	100	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—
	Botm.	8.20	8.50	9.50	8.33	8.57	8.92	8.08	7.45	7.25
S ‰	0	32.43	32.23	32.74	32.23	32.25	32 25	32.32	32.32	32.41
	10	32.30	32.27	31.91	32.23	32.50	32.39	32.41	32.50	32.54
	25	—	32.27	32.00	32.41	32.32	32.29	32.57	32.57	32.54
	50	—	—	—	—	—	—	32.57	32.54	32.54
	100	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—
	Botm.	32.30	32.27	31.94	32.41	32.38	32.32	32.57	32.54	32.50
Scunding (m)		37	35	48	40	35	50	60	73	82
Transp. (m)		6.5	6	4	8	5.5	6	6	10	8
Color		—	—	—	6	5	5	5	5	5
Wave		2	2	2	2	2	3	3	3	3
Swell		1	1	1	1	1	1	2	2	2
Air Temp. (°C)		11.2	11.4	10.8	12.8	12.7	12.0	13.8	14.2	14.5
Air Press. (mm)		769.5	769.5	771	762	762	762	763	762	762
Wind		NW. 3	W. 10	NW. 2	SW. 1	SW. 1	SW. 2	SW. 2	SW. 1	SW. 2
Cloud		Cu. 10	Cu. 10	Cu. 10	Ci. 6	St. 6	Cc. 7	Cc. 7	St. 8	Sc. 7
Weather		C	C	C	BC	BC	BC	BC	C	BC

Date		③ June 1961					④ December 1961					
Station Number		S_1 35°51′ 126°17′	S_2 35°51′ 126°07′	S_3 35°51′ 125°55′	S_4 35°57′ 125°47′	S_5 36°04′ 125°45′	01	02	03	04	05	06
Day		3	3	3	3	2	9	9	9	9	9	9
Item	Time / Z(m)	1225	1115	1000	0955	2320	0840	0950	1110	1300	1430	1600
T °C	0	18.50	19.90	18.90	15.90	14.20	11.70	12.60	13.40	13.50	13.40	13.30
	10	15.45	15.05	14.82	12.08	12.89	11.65	12.58	13.31	13.45	13.45	13.29
	25	14.15	13.28	11.28	11.04	10.05	—	12.57	13.27	13.38	13.25	13.22
	50	—	—	—	—	—	—	—	—	13.35	13.20	13.17
	100	—	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—	—
	Botm.	13.89	13.10	11.10	11.38	9.82	10.45	12.05	13.15	13.25	13.15	13.05
S ‰	0	32.03	32.00	31.21	32.18	32.21	32.57	32.68	32.70	32.79	32.88	32.85
	10	32.11	32.02	32.36	32.30	32.36	32.01	32.79	32.68	32.77	32.81	32.86
	25	32.02	32.16	32.38	32.32	32.36	—	32.65	32.68	32.79	32.97	32.90
	50	—	—	—	—	—	—	—	—	32.76	32.79	32.99
	100	—	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—	—
	Botm.	32.11	32.14	32.39	32.32	32.48	32.70	32.65	32.70	32.85	32.81	33.06
Sounding (m)		31	34	54	37	58	32	34	46	60	72	78
Transp. (m)		6	6	10.5	9	9	3	2.5	3	5	5	7
Color		6	3	5	5	5	6	6	6	5	4	4
Wave		2	5	3	3	3	2	2	3	3	4	5
Swell		1	1	1	1	2	2	2	2	2	3	3
Air Temp. (°C)		19.5	19.8	19.4	17.1	14.2	9.1	9.3	9.4	9.6	10.5	10.2
Air Press. (mm)		759	760	761	760	762	770	771	771	771	770	770
Wind		NE. 1	NE. 1	NE. 1	NE. 1	NW. 3	E. 2	E. 2	E. 3	S. 3	S. 4	S. 4
Cloud		St. 2	St. 4	St. 2	Cu. 3	St. 6	Cc. 6	St. 5	St. 5	St. 6	Cs. 6	St. 8
Weather		B	BC	B	BC	BC	BC	BC	BC	BC	BC	C

E. 308선 해 양 관 측 성 적

Oceanographic Data, Line 308

Date		① May 1961							② June 1961		
Station Numder		01	02	03	04	05	06	07	03	04	05
Day		3	3	3	3	3	3	3	2	2	2
Item	Time / Z(m)	0840	0940	1045	1155	1315	1435	1555	1830	1950	2115
T °C	0	11.80	12.20	10.10	11.15	11.20	11.10	11.20	14.60	14.28	14.09
	10	11.55	—	9.45	10.19	10.02	9.25	10.55	13.48	12.85	13.42
	25	—	—	—	8 22	7.99	7.35	7.85	—	11.55	10.12
	50	—	—	—	—	—	—	7.05	—	—	—
	100	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	11.25	10.05	9.25	8.05	7.55	6.85	6.89	12.25	9.45	9.02
S ‰	0	32.27	32.32	—	32.50	32.50	32.50	32.50	32.16	32.36	32.29
	10	32.30	—	—	32.50	32.50	32.50	32.56	32.21	32.41	32.32
	25	—	—	—	32.47	32.59	32.50	32.50	—	32.36	32.32
	50	—	—	—	—	—	—	32.50	—	—	—
	100	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	32.34	32.32	—	32.68	32.50	32.54	32.54	32.27	32.45	32.41
Sounding (m)		29	13	27	53	56	58	66	24	55	49
Transp. (m)		2	1.5	2.5	2	10	8	8	6	—	—
Color		9	8	8	7	6	5	5	6	—	—
Wave		2	2	2	3	2	3	2	3	3	3
Swell		1	1	1	1	1	1	1	2	2	2
Air Temp. (°C)		11.7	12.1	13.3	13.0	12.9	13.1	12.8	14.2	13.8	13.8
Air Press. (mm)		758	758	757.5	757	756	755	755	762	762	762
Wind		NE. 1	NE. 1	NW. 1	NW. 2	NW. 2	NW. 2	NW. 2	NW. 3	NW. 3	NW. 3
Cloud		St. 9	St. 8	Ci. 8	Cc. 8	Cc. 8	Cc. 8	Cc. 8	Cc. 5	St. 5	Cs. 5
Weather		C	R	C	C	C	C	C	BC	BC	BC

F. 307선 해 양 관 측 성 적

Oceanographic Data, Line 307

Date		① May 1961				
Station Number		01	02	03	04	05
Day		4	4	4	4	4
Item	Time / Z(m)	1700	1520	1410	1240	1120
T °C	0	10.70	10.10	10.20	10.50	11.30
	10	10.62	—	9.12	9.22	9.49
	25	8.89	—	—	8.65	8.69
	50	—	—	—	—	—
	100	—	—	—	—	—
	150	—	—	—	—	—
	200	—	—	—	—	—
	300	—	—	—	—	—
	Botm.	8.72	9.18	8.58	8.58	8.68
S ‰	0	31.96	32.16	31.98	31.89	32.03
	10	32.05	—	32.03	31.96	33.86
	25	32.05	—	—	31.96	32.03
	50	—	—	—	—	—
	100	—	—	—	—	—
	150	—	—	—	—	—
	200	—	—	—	—	—
	300	—	—	—	—	—
	Botm.	32.05	31.96	31.96	31.96	31.96
Sounding (m)		55	15	25	43	47
Transp. (m)		2	2	2	6	10
Color		11	7	7	7	5
Wave		3	4	4	3	3
Swell		2	2	2	2	2
Air Temp. (°C)		11.5	11.9	11.9	12.0	11.7
Air Press. (mm)		749	748	748	748	749
Wind		NE. 3	NE. 3	NE. 3	NE. 3	NE. 3
Cloud		Cc. 9	Cc. 9	Cc. 10	Ci. 10	St. 10
Weather		R	R	R	R	R

부 유 생 물 조 사 표

PLANKTON DATA

1 9 6 1

浮游生物調査表

本場 및 各 支場에서 每月 海洋觀測과 同時에 採集한 資料를 檢索 調査한 結果는 다음 表와 같다.

1) 採集網 및 方法

採集網은 海洋調査年報 第9號와 같이 中井式 Plankton Net〈特 B型〉을 使用하여 定量採集하였으며 網의規格은 口經 45cm, 全長 100cm〈圓筒形의 上部(15cm)는 Canvas 製이며 圓錐形의 下部(85cm)는 合成樹脂加工을 한 Müller Gaze GG 54(網目 0.33mm)〉이다. 採集方法은 水深 50m에서 表面까지 約 1分間의 速度로서垂直採集 (水深이 50m以淺일때는 底層에서 表面까지)하여 3—5%의 홀마린으로 固定하였다.

2) 採集된 試料의 處理方法

採集한 資料의 定量은 大型인 水母類와 甲殼類는 除去하고 容積測定法에 依하여 沈澱管에서 24時間 不動沈澱시켜 그 沈澱된 量을 測定하였다.

調査方法은 沈澱된 量1cc를 다음 表와 같이 稀釋하여 顯微鏡下에서 檢索計數하였다.

Plankton Collection

The plankton were collected at the hydrographic stations of the sectional lines in the adjacent seas of Korea. The results are as following tables.

1) Plankton net;

NAKAI'S Plankton net (or Marutoku net - "B"): Mouth diameter 45cm; front section length 15cm, shape cylindrical, material canvas; bag length 85cm, shape conical, material Müllergaze No. GG 54. The net was hauled from 50meter depth to the surface.

2) Method of analysis;

i) Quantitative analysis; precipitation method

ii) Qualitative analysis;

1c.c. of plankton samples settled transfered to the dilution bottle, and diluted in 100cc of sea water. the 1c.c. of diluted samples was taken out by the stemple pipette, and the plankton species were counted under the microscope. On the following tables the numbers are shown in percent of the plankton composition

A. 107선 부유생물 조사성적

Plankton Data, Line 107 (Vertical haul) 1961

Month	July									
Station	02	03	04	05	06	07	08	09	10	02
Date	31	31	31	31	31	31	31	1	1	29
Time	0900	1045	1250	1505	1735	2000	2225	0100	0330	0620
Volume(cc)	2.0	4.0	6.0	2.5	2.5	1.5	5.0	6.5	6.0	2.0
Rate of dilute	50	50	50	50	50	50	50	50	50	50
Collected depth	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	44	23	30	40	58	33	37	47	37	14
Phytoplankton Organisms	8	2	3	9	23	17	25	—	5	—
Zooplankton										
Copepeda sp	28	12	18	25	25	15	25	26	20	1
Copepoda larva	+			+	3		4			
Calanus sp	7			5	3		2	17	9	10
Calanus finmarchicus		10	11							
Paracalanus sp										
Eucalanus sp										
Pseudocalanus elongatus										
Pseudocalanus sp		+	+		+					
Rhincalanus sp										
Oithona sp				5	5		1		2	
Oithona plumifera	4		1							
Euchaeta marina										
Euchaeta japonica			+							
Corycaeus venustus	+	+			+				+	
Corycaeus sp			+		1					
Centropages sp		+			+					+
Candacia sp										
Metridia sp		+				+				
Acartia sp	+	+		+						
Temora sp										
Parathemisto sp	3	1	+		+	1	+	1	1	2
Penilia sp					10	5				
Evadne sp				+	1	1	1	1	3	
Podon Schmackeri						1				
Calycophora sp										
Noctiluca scintillans										
Pyrocystis noctiluca										
Sagitta sp		+	+		6	1	+	+	+	+
Oikopleura sp	1		+	2	2	1	+	2	1	1
Ostracoda sp						+		+		
Ceratium sp	1				1	6			1	
Doliolum sp					1	1				
Euphausia sp										+
Euphausia larva							3			
Lucifer raynaudii						+				+
Planktomya sp					+		+			
Acanthometron sp										
Medusea sp							+			
Ophiopluteus larva										
Salpa sp				+						
Muggiaea sp										
Peiagic egg				2					+	
Copepoda egg								+		
Shrimp larva										
Mysidea larva										
Polychaeta larva										
Fish larva				1	+	1	+			
Aulacantha scolymantha										

August								September				
03	04	05	06	07	08	09	10	02	03	04	05	06
29	29	29	29	27	27	30	30	23	23	23	23	23
0905	1100	1340	1640	1915	2200	0110	0340	0920	1125	1315	1540	1815
4.0	2.5	1.0	5.0	5.0	10.0	6.0	8.0	1.5	3.5	2.0	2.0	5.0
50	50	50	50	50	50	50	50	50	50	50	50	50
—	50	50	50	50	50	50	50	50	50	50	50	50
24	28	35	26	54	63	56	34	31	33	23	37	24
—	1	—	11	25	6	—	3	—	—	—	10	—
5	3	6	16	15	29	26	18	18	25	5	15	14
12	11	13	3	11	2	10	+ 5	6	2	5	14	5
+		+		+							+	+
1				2	3	4	1		2			
		3						1				
		+								+		
+		+		+		+			+			
	2		2	1		3	1					
		+								+	+	
				9							3	
						+			+			
		+						+		+		
							1					
1			1	+	2		1	2	+	1	1	1
	2											
+	6	2										
										2		1
5	+ +	6	3	2	4	2	1	3	1	7	1	
		3	+		2	3	4	1	3	1	3	1
			+	+		+						+
	3			2	3	5	1					
							+				+	
			+							1		
			+		3	2			+	+		
			+	1	1				+			
			1	3	9	1	1					
											+	
	1	2		+								1
				2								
				+								
							+					
										1	+	1
					+	+						
				6	5							

Month			November							
Station	07	08	02	03	04	05	06	07	09	10
Date	23	23	5	5	5	5	5	5	6	6
Time	2155	2325	0955	1100	1330	1540	1805	2030	0804	0340
Volume(cc)	6.0	5.0	2.5	0.5	4.0	8.0	7.0	2.0	5.0	8.5
Rate of dilute	50	50	—	—	50	—	—	—	—	—
Collected depth	50	50	50	50	50	—	50	—	50	—
Zooplankton Organisms	40	31	21	33	19	16	15	16	13	5
Phytoplankton Organisms	10	10	1	1332	124	1376	181	64	46	273
Zooplankton										
Copepeda sp	8	11	8	13	9	4	6	11	8	3
Copepoda larva	1				2					
Calanus sp	10	5	3				1			
Calanus finmarchicus										
Paracalanus sp										
Eucalanus sp			1							
Pseudocalanus elongatus										
Pseudocalanus sp		+				+		+		
Rhincalanus sp										
Oithona sp			1					1		
Oithona prumifera			6		2	4			1	
Euchaeta sp										
Euchaeta marina							+			
Euchaeta japonica		+		+			+			
Corycaeus venustus	+			+			+			
Cory. sp	1	1				+			+	
Centropages sp										
Cent. abdominails										
Candacia sp		8		5						
Metridia sp							+			
Acartia sp										
Temora sp										
Parathemisto sp	1							+		
Penilia sp										
Evadne sp										
Podon Schmackeri									+	+
Calycophora sp										
Noctiluca scintillans				+						
Pyrocystis noctiluca				+						
Sagitta sp	2	3	1		+	4	+	+	+	
Peridinium sp					1					
Oikopleura sp			+	10	2		1	+	2	+
Ostracoda sp	+									
Ceratium sp	2	2		5	3	4	4	4	2	2
Doliolum sp				+						+
Euphausia sp										
Euphausia larva										
Lucifer raynaudii		1	1					+	+	
Planktomya sp	+	+								
Acanthometron sp					+	+	3			+
Medusea sp										
Ophiopluteus larva										
Salpa sp										
Moggiaea sp										
Pelagic egg										
Mysidea larva	+									
Polychaeta larva	+									
Aulacantha scolymantha	15									

Month	July									
Station	02	03	04	05	06	07	08	09	10	02
Date	31	31	31	31	31	31	31	1	1	29
Time	0900	1045	1205	1505	1735	2000	2225	0100	0330	2620
Volume(cc)	2.0	4.0	6.0	2.5	2.5	1.5	5.0	5.5	6.0	2.0
Rate of dilute	50	50	50	50	50	50	50	50	50	50
Collected depth	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	44	23	30	40	58	33	37	47	37	14
Phytoplankton Organisms	8	2	3	9	23	17	25	—	5	—
Phytoplankton										
Chaetoceros spp	5		2		3	15	6			
Ch. affinis										
Ch. borealis										
Ch. didymus										
Ch. decipiens										
Ch. coarctatus					15					
Ch. densus										
Ch. setoensis										
Ch. peruvianus										
Ch. socialis										
Ch. constrictus										
Ch. convoltus										
Ch. furca										
Rhizosolenia sp		2	1	?	3	1	1	+	+	
Rh. styliformis										
Rh. Stolterfothii										
Rh. hebetata										
Rh. Schrubsolei										
Rh. alata										
Rh. indica										
Rh. calcar-avis										
Rh. setigera										
Skeletonema costatum										
Biddulphia sinensis										
Biddulphia aurita										
Thalassiothrix Frauenfeldii							8			
Thalassionema nitzschioides										
Thalassiothrix longissima										
Coscinodiscus sp					2	1	+			
Cos. Janischii										
Stephanopyxic palmeriana	3		+	+	X	+	X			
Bacteriastrum varians										
Asterionella japonica										
Hemialus Hauckii										
Lauderia borealis										
Cerataulina sp										
Ditylum Brightwellii										
Eucampia zoodiacus										
Leptocylindrus danicus										
Climacodium sp							10		5	
Pleurosigma affine										
Paralia sulcata										
Dactyliosolen tenuis										
Actynoptychus sp										
Melosira sp										
Guinardia sp										
Corethron criophilum										
Nitzschia seriata										

Month	August									
Station	03	04	05	06	07	08	09	10	02	03
Date	29	29	29	29	29	29	30	30	23	23
Time	0905	1100	1340	1640	1915	2200	0110	0340	0920	1125
Volume(cc)	4.0	2.5	1.0	5.0	5.0	10.0	6.0	8.0	1.5	3.5
Rate of dilute	50	50	50	50	50	50	50	50	50	50
Collected depth	—	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	24	28	35	26	54	63	56	34	31	33
Phytoplankton Organisms	—	1	—	11	25	6	—	3	—	—
Phytoplankton										
Chaetoceros spp										
Ch. affinis										
Ch. borealis										
Ch. didymus										
Ch. decipiens										
Ch. coarctatus				10	25	5	+			
Ch. densus						+				
Ch. setoensis				+						
Ch. peruvianus										
Ch. socialis					+					
Ch. constrictus							+			
Ch. convoltus										
Ch. furca										
Rhizosolenia sp		1		1	+	1	+	3		
Rh. styliformis										
Rh. Stolterfothii										
Rh. hebetata										
Rh. Schrubsolei										
Rh. alata										
Rh. indica										
Rh. calcar-avis										
Rh. setigera										
Skeletonema costatum										
Biddulphia sinensis										
Biddulphia aurita										
Thalassiothrix Frauenfeldii										
Thalassionema nitzschioides										
Thalassiothrix longissima										
Coscinodiscus sp										
Cos. Janischii										
Stephanopyxis palmeriana										
Bacteriastrum varians										
Asterionella japonica										
Hemialus Hauckii										
Lauderia borealis										
Cerataulina sp										
Ditylium Brightwellii										
Eucampia zoodiacus										
Leptocylindrus danicus										
Climacodium sp										
Pleurosigma affine										
Paralia sulcata										
Dactyliosolen tenuis										
Actynoptychus sp										
Melosira sp										
Guinardia sp										
Corethron criophilum										
Nitzschia seriata										

September					November							
04	05	06	07	08	02	03	04	05	06	07	09	10
23	23	23	23	23	5	5	5	5	5	5	6	6
1315	1540	1815	2155	2325	0955	1100	1330	1540	1805	2030	0804	0340
2.0	2.0	5.0	6.0	5.0	2.5	0.5	4.0	8.0	7.0	2.0	5.0	8.5
50	50	50	50	50	—	—	50	—	—	—	—	—
50	50	50	50	50	50	50	50	—	50	—	50	—
23	37	24	40	31	21	33	19	16	15	16	13	5
—	10	—	10	10	1	1332	124	1376	181	64	46	273
			5			87	15	108	8	5	17	15
						190	24	272	5			100
							11		5		2	6
						10		12				
						10		20				
			5	10		30	5	+	7	10	+	18
			+									
		+							+			
	+					+					+	
					+							
				+					+			
											18	6
	+	+							1		2	
						15	1	40	10		1	10
						45	1			10		
											1	3
						75	25	320	34	6		29
								4		1		1
							1	12	2			
						10	1		+			1
						135	19	112	34	17		25
						155	2	128	2			8
					1	100	14	148	48	10	1	28
						+	1				1	
						10						
						+	4	116			+	15
								4				
												4
								36				3
		+		+								
										5		
						+						
						460		44	25		3	

B. 106선 부유생물조사성적

Plankton Data, Line 106 (Vertical haul) 1961

Month	June									
Station	02	03	04	05	06	07	08	02	03	04
Date	27	27	27	27	27	27	27	2	1	1
Time	1010	1105	1238	1425	1637	1850	2105	015	2250	1945
Volume(cc)	7.0	7.5	1.0	5.0	2.0	2.0	4.0	5.0	2.0	3.5
Rate of dilute	50	50	50	50	50	50	50	50	50	50
Collected depth	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	29	23	24	66	50	54	51	33	51	61
Phytoplankton Organisms	—	—	—	—	—	2	—	—	2	33
Zooplankton										
Copepoda sp	12	16	15	47	20	20	21	7	27	37
Copepoda larva									2	+
Calanus sp	15	5	5	8	11	5			10	10
Calanus plumchrus										
Paracalanus sp		+		+				+		+
Eucalanus sp										
Pseudocalanus sp		+		+					+	
Rhincalanus sp										
Oithona plumifera		1		2	14	4			3	1
Oithona sp							3			
Euchaeta sp			+						+	
Euchaeta marina										
Euchaeta japonica										
Corycaeus venustus										
Cory. sp				1						
Centropages sp		+		+					2	2
Cent. abdominalis										+
Candacia sp										
Temora sp										
Parathemisto sp	1	1	3	1		5	1	26	1	1
Hyperia sp					+					
Penilia sp										
Evadne sp									+	1
Calycophora sp										
Noctiluca scintillans										
Sagitta sp	+	+		2	+	+			+	+
Oikopleura sp	1	+	+	+	5	4	1		5	2
Ostracoda sp				1						
Ceratium sp										3
Doliolum sp										
Echinopluteus sp										
Euphausia sp										+
Euphausia larva				3	+					
Lucifer raynaudii										
Planktomya sp										
Acanthometron			1			13	25			
Medusea sp									1	
Brachyura larva										
Ligula larva										
Ophiopluteus larva										
Muggiaea sp										
Pelagic egg						3			+	+
Copepoda egg				1						
Shrimp larva										
Polychaeta larva										
Fish larva									+	
Scale										
Aulacantha scolymantha										

August												
05	05	07	08	09	10	02	03	04	05	06	07	08
1	1	1	1	1	1	9. 2	31	30	30	30	30	30
1810	1545	1335	1105	0845	0610	0935	0040	2245	2000	1730	1455	1205
1. 5	5. 0	7. 5	2. 0	1. 5	4. 0	2. 5	6. 0	8. 0	8. 5	2. 0	1. 5	5. 0
50	100	50	50	50	50	50	50	50	50	50	50	50
50	50	50	50	50	50		50	50	50	50	50	50
52	17	207	28	38	38	46	54	40	29	32	77	128
39	400	15	6	12	—	6	2	1	17	5	6	2
18	3	2	14	13	18	17	36	24	12	7	4	7
3		1	3			+		1	1			
10				5	10	6	8	2	1			4
						+						
				1								
		+						+				+
3		2		4								
											4	5
							+					
			3				2		1			
									2			
	+	1		2	+	4		+	+	+	+	
							1					
9	1		2	1		9						
+			1	6	5	+						
					1							
				+								
1	+	1	1	+	+	4	2	2	5	2	9	7
4		+	2	2	3	2	1	1		1		2
1								+		+		
3	2		2	+	1	1	1	7	3	2	6	2
+				1				+	+			
						+						
							1	+				
							1	+		1	+	
+				+						1	1	+
	11	200		2			1	+	3	18	35	
+			+						+			
						1						
									1			
			+			2						
						+			+			
+								1				
											17	+ 100

Month		September								
Station	09	02	03	04	05	06	07	08	09	10
Date	30	25	25	25	25	25	25	25	26	26
Time	0240	1005	1110	1250	1440	1700	1930	2210	0035	0310
Volume(cc)	3.5	1.5	3.0	3.0	5.0	2.5	5.0	7.0	3.0	3.0
Rate of dilute	50	—	50	50	50	50	50	50	50	50
Collected depth	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	47	41	52	44	45	67	39	42	39	47
Phytoplankton Organisms	31	—	—	—	10	4	18	26	28	9
Zooplankton										
Copepoda sp	3	25	27	19	22	24	14	14	15	17
Copepoda larva	1									
Calanus sp	3	3	6	12	10	5	5	3	4	5
Calanus plumchrus										
Paracalanus sp				+						
Eucalanus sp										
Pseudocalanus sp					+					
Rhincalanus sp										
Oithona plumifera										1
Oithona sp	2	3	8	2	3	2			3	
Euchaeta sp										
Euchaeta marina									+	
Euchaeta japonica										
Corycaeus venustus										
Cory. sp	4	4	1	1			1			4
Centropages sp				+						
Cent. abdominalis										
Candacia sp	1						4	1	2	1
Temora sp	1									
Parathemisto sp	+		+		+	+	1		1	2
Hyperia sp										
Penilia sp										
Evadne sp	1							1	2	1
Calycophora sp		+		+	1	1				
Noctiluca scintillans										
Sagitta sp	10	+	3	2		4	2	3	1	3
Oikopleura sp	3	1	6	6	1	6	3	3	5	5
Ostracoda sp			+		+	1	+			
Ceratium sp	2	3		1	3	16	2	11	3	5
Doliolum sp		1		1	2	1	+	+		
Euphausia sp										
Euphausia larva										
Lucifer raynaudii					1		1	1	1	+
Planktomya sp	1		1		+	+	+	+	1	
Acanthometron sp	3				1	3				
Medusea sp								1	+	
Brachyura larva							1			
Lingula larva							1			
Ophiopluteus larva		+			+	1	+			
Ouggiaea sp	1									
Pelagic egg										
Copepoda egg					+	2	+		+	
Shrimp larva										
Polychaeta larva		1				1				
Fish larve		+			+					
Scale	10	+								
Aulacantha scolymantha							4	4	1	3

November							
02	03	04	05	06	07	08	10
6	6	6	6	6	6	6	6
2315	2135	1950	0810	1550	1325	1055	0635
3.0	4.5	3.0	2.0	5.5	0.3	3.5	0.4
50	50	50	50	50	50	50	50
50	50	50	50	50	50	50	50
20	51	29	25	25	33	40	2
3	58		132	376	225	235	55
12	32	13	10	6	15	25	1
			1				
1	5		1				
		+					
	1				1		
	+						
		1		1	2	1	
				+			
	+						
1	2		1	1	2		
1	+	+		1	+	1	
							1
3		1	3	3	3	3	+
	10	12	4	+		2	+
1	1	+	2	8	10	3	
	+			1	+	+	
	--						
		1					
+	+	+		+	+	+	
			1	3		3	
			2	+	+	2	
				:			
1		+					

Month	June									
Station	02	03	04	05	06	07	08	02	03	04
Date	27	27	27	27	27	27	27	2	1	1
Time	1010	1105	1233	1425	1637	1850	2105	015	2250	1945
Volume(cc)	7.0	7.5	1.0	5.0	2.0	2.0	4.0	5.0	2.0	3.5
Rate of dilute	50	50	50	50	50	50	50	50	50	50
Collected depth	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	29	23	24	66	50	54	51	33	51	6
Phytoplankton Organisms	—	—	—	—	2	—	—	—	2	23
~~Zoo~~phyto plankton										
Chaetoceros spp						+				3
Ch. affinis										
Ch. borealis										
Ch. didymus										
Ch. decipiens										
Ch. coarctatus										
Ch. densus										
Ch. setoensis										
Ch. peruvianus										
Ch. socialis										
Ch. constrictus										
Ch. convoltus										
Ch. furca										
Rhizosolenia sp						2			2	
Rh styliformis										25
Rh. Stolterfothii										
Rh. hebetata										
Rh. Shrubsolei										
Rh. alata										
Rh. indica										
Rh. calcar-avis										
Rh. setigera										
Skeletonema costatum										
Biddulphia sinensis										
Biddulphia aurita										
Thalassiothrix Frauenfeldii										
Thalassionema nitzschioides										
Thalassiothrix longissima						+				
Coscinodiscus sp										
Setphanopyxis palmeriana										5
Coscinodiscus Janischii										
Bacteriastrum varians										
Asterionella japonica										
Hemialus Hauckii										
Lauderia borealis										
Cerataulina sp										
Climacodium sp										
Pleurosigma affine										
Paralia sulcata										
Dactyliosolen tenuis										
Actynoptychus sp										
Melosira sp										
Guinardia sp										
Corethron criophilum										
Nitzschia seriata										
Nitzschia paradoxa										
Trichodesmium sp										
Diatoma sp										

August												
05	05	07	08	09	10	02	03	04	05	06	07	03
1	1	1	1	1	1	9. 2	31	30	30	30	30	30
1810	1545	1335	1105	0845	0610	0935	0040	2245	2000	1730	1455	1205
1. 5	5. 0	7. 5	2. 0	1. 5	4. 0	2. 5	6. 0	8. 0	8. 5	2. 0	1. 5	5. 0
50	100	50	50	50	50	50	50	50	50	50	50	50
50	50	50	50	50	50		50	50	50	50	50	50
52	17	207	28	38	38	46	54	40	29	32	77	128
39	400	15	6	12	10	6	2	1	17	5	6	2

3

\+ 15 5 5 1

9
17 400 15 \+ 2 3 2 1 2 \+ 1

\+ 1 \+ \+ 1 \+
10 \+ \+
\+

\+ 5 10

\+ \+
3

Month		September								
Station	09	02	03	04	05	06	07	08	09	10
Date	30	25	25	25	25	25	25	25	26	26
Time	0940	1005	1110	1250	1440	1700	1930	2210	0035	0310
Volume(cc)	3.5	1.5	3.0	3.0	5.0	2.5	5.0	7.0	3.0	3.0
Rate of dilute	50	—	50	50	50	50	50	50	50	50
Collected depth	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	47	41	52	44	45	67	39	42	39	47
Phytoplankton Organisms	31	—	—	—	10	4	18	26	28	9
Phytoplankton										
Chaetoceros spp				+						
Ch. affinis										
Ch. borealis										
Ch. didymus										
Ch. decipiens										
Ch. coarctatus	25	+	+		3		15	20	25	5
Ch. densus										
Ch. setoensis										
Ch. peruvianus										
Ch. socialis										
Ch. constrictus										
Ch. convoltus										
Ch. furca										
Rhizosolenia sp	6	+		+	4	3	3	6	3	4
Rh. styliformis										
Rh. Stolterfothii										
Rh. hebetata										
Rh. Schrubsolei										
Rh. alata										
Rh. indica										
Rh. calcar-avis										
Rh. setigera										
Skeletonema costatum										
Biddulphia sinensis										
Biddulphia aurita										
Thalassiothrix Frauenfeldii										
Thalassionema nitzschioides										
Thalassiothrix longissima										
Coscinodiscus sp										
Stephanopyxis palmeriana										
Coscinodiscus Janischii					+	1				
Bacteriastrum varians										
Asterionella japonica										
Hemialus Hauckii										
Lauderia borealis										
Cerataulina sp										
Climacodium sp										
Pleurosigma affine										
Paralia sulcata										
Dactyliosolen tenuis										
Actynoptychus sp										
Melosira sp										
Guinardia sp										
Corethron criophilum										
Nitzschia seriata										
Nitzschia paradoxa										
Trichodesmium sp	+							+		+
Diatoma sp										

November							
02	03	04	05	06	07	08	10
6	6	6	6	6	6	6	6
2315	2135	1950	0810	1550	1325	1055	0635
3. 0	4. 5	3. 0	2. 0	5. 5	0. 3	3. 5	0. 4
50	50	50	50	50	50	50	50
50	50	50	50	50	50	50	50
20	51	29	25	25	33	40	2
3	58	—	132	376	225	235	55
			25	50	100	65	17
	10		15	75	15	30	
	5		10	10		3	
				10	25	15	
			5		5		
				15			
					15	5	
2	5		25	50			10
					25	30	
				1			1
1	3		2			+	
	10	+	10	20		10	2
+	15	+	+	25	5	+	
	10		35	100	10	75	17
					10		+
			5				
			5		5		
			5				
				5			
							5
				15		5	

C. 105선 부유생물 조사성적

Plankton Data, Line 105 (Vertical haul) 1961

Month	June		July								
Station	03	04	03	04	05	06	07	08	09	03	04
Date	23	23	29	29	29	29	29	29	29	2	2
Time	1225	1135	1030	1115	1313	1510	1756	2050	2336	1310	1420
Volume(cc)	2.0	1.0	2.0	2.5	0.1	1.0	3.0	6.0	5.0	2.5	4.0
Rate of dilute	—	50	50	50	—	—	50	50	15	50	50
Collected depth	50	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	32	35	36	62	82	34	406	268	21	53	40
Phytoplankton Organisms	—	1	7	—	20	6	64	89	104	—	—
Zooplankton											
Copepoda sp	31	34	16	25	28	8	2	7	10	25	20
Copepoda larva				3	2	1		1	+		
Calanus sp			7	13	11	17				22	13
Calanus finmarchicus											
Calanus plumchrus											
Paracalanus sp		+			+			+			+
Eucalanus sp											
Pseudocalanus elongatus											
Pseudocalanus sp	+				+						
Rhincalanus sp											
Oithona plumifera			4	1	8		1	5	5		
Oithona sp										1	
Euchaeta sp											
Euchaeta marina											
Euchaeta japonica											
Corycaeus venustus											
Cory. sp			1								2
Centropages sp				+							
Cent. abdominalis											
Candacia sp											
Can. pachydactyla											
Can. bipinnata											
Metridia sp											
Parathemisto sp	+	1	1	2	1	4	+	1		1	+
Penilia sp						2	+				
Evadne sp											1
Sagitta sp	+	+	3			1		1	1	3	+
Peridinium sp											
Oikopleura sp			2	6	4		2	+	4	1	1
Ostracoda sp								+			1
Ceratium sp							1	2	1		2
Doliolum sp						+ +					
Echinopluteus sp											
Euphausia sp	1	+							+		
Euphausia larva				3							
Tintinnopsis sp											
Lucifer raynaudii											
Planktomya sp							+				
Acanthometron sp							400	250			
Medusea sp								1	+		
Lingula larva										+	
Ophiopluteus larva											
Salpa sp					3					+	
Muggiaea sp											
Pelagic egg			2	9	25	1		+	+		
Copepoda egg								+			
Polychaeta larva											
Fish larva				+				+	+		

September						
05	06	07	08	09	10	11
2	2	2	3	3	3	3
1620	1820	2120	0020	0330	0640	0905
5.5	4.0	6.0	4.0	6.0	8.0	8.0
50	50	50	50	50	50	50
50	50	50	50	—	50	50
57	43	33	53	21	37	39
10	9	—	23	10	13	15
32	24	9	11	5	14	8
1	1		+	1		
16	8	3	1		6	
	+	+			+	
	+					
2	3	4	2	3		2
	1		1			2
+						
+		+	2	1	+	+
1						
+	1	8	2	5	+	11
1	+	1	3	2	+	+
+	1				+	
4	1	3	4		4	5
					1	
+						
	+					
+	+	1	2	3	1	
				1	1	
		4	25		10	11
+	1					
	2					
+						
+						

November							
03	04	05	06	07	08	09	10
2	2	2	2	2	2	2	2
1640	1540	1350	1155	0945	0722	0530	0315
2.0	1.0	1.0	—	2.0	4.0	4.0	2.0
50	50	50	0.01	100	100	50	50
50	50	50	50	50	50	50	50
18	19	22	—	21	25	14	21
6	97	79	—	330	136	270	103
15	8	9	+	11	11	9	7
	1			+		+	
		+		+	+		+
	1						
					+		
1		2			1	1	
	+						
		2					
1	+						
+	1			2	3	1	6
1	4	3	+	2	3		+
+	2	6	+	4	3	2	1
+				1	+	1	
	1						
				1	1	+	2
					3		5
		+					
			+		+	+	
+							

Month	June		July								
Station	03	04	03	04	05	06	07	08	09	03	04
Date	23	23	29	29	29	29	29	29	29	2	2
Time	1225	1135	1030	1115	1313	1510	1756	2050	2336	1310	1420
Volume(cc)	2.0	1.0	2.0	2.5	0.1	1.0	3.0	6.0	5.0	2.5	4.0
Rate of dilute	—	50	50	50	—	—	50	50	15	50	50
Collected depth	50	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	32	35	36	62	82	34	406	268	21	53	40
Phytoplankton Organisms	—	1	7	—	20	6	64	89	104	—	—
Phytoplankton											
Chaetoceros spp							6	3	35		
Ch. affinis									5		
Ch. borealis											
Ch. didymus											
Ch. decipiens											
Ch. coarctatus						3					+
Ch. densus											
Ch. setoensis											
Ch. peruvianus											
Ch. socialis											
Ch. constrictus											
Ch. convoltus											
Ch. furca											
Rhizosolenia sp							28	52	10	+	
Rh. styliformis			2		20	2	9				
Rh. Stolterfothii											
Rh. hebetata											
Rh. Schrubsolei											
Rh. alata											
Rh. indica											
Rh. calcar-avis											
Rh. setigera											
Skeletonema costatum			5								
Biddulphia sinensis			+						2		
Biddulphia aurita											
Thalassiothrix Frauenfeldii											
Thalassionema nitzschioides											
Thalassiothrix longissima		1				1	15	8	3		
Coscinodiscus sp									7		
Stephanopyxis palmeriana									3		
Coscinodiscus Janischii											
Bacteriastrum varians											
Asterionella japonica											
Hemialus Hauckii											
Lauderia borealis											
Ditylium Brigntwellii								1			
Eucampia zoodiacus											
Leptocylindrus danicus											
Climacodium sp							6	25	25		
Pleurosigma affine											
Paralia sulcata											
Dactyliosolen tenuis											
Actynoptychus sp											
Melosira sp											
Guinardia sp											
Corethron criophilum									4		
Diatoma sp									10		

September						
05	06	07	08	09	10	11
2	2	2	3	3	3	3
1620	1820	2120	0020	0330	0640	0905
5.5	4.0	6.0	4.0	6.0	8.0	8.0
50	50	50	50	50	50	50
50	50	50	50	—	50	50
57	43	33	53	21	37	39
10	9	—	23	10	13	15
					10	
10	3		10	+		15
	+		13	10	3	+
					+	

D. 104선 부유생물 조사성적

Plankton Data, Line 104 (Vertical haul) 1961

Month	June						
Station	04	05	06	07	08	09	10
Date	21	21	21	21	21	21	21
Time	0615	0653	0918	1135	1419	1650	1920
Volume(cc)	3.0	2.7	0.8	1.0	2.0	2.0	6.0
Rate of di ute	50	100	—	100	50	50	50
Collected depth	50	50	50	50	50	50	50
Zooplankton Organisms	47	25	74	36	59	30	36
Phytoplankton Organisms	—	—	20	—	6	1	—
Zooplankton							
Copepoda sp	44	24	70	32	50	26	36
Copepoda larva			1		+		
Calanus sp							
Calanus finmarchicus							
Calanus plumchrus							
Paracalaus sp							
Eucalanus sp							
Pseudocalanus elongatus							
Pseu. sp							
Rhincalanus sp							
Oithona sp							
Oithona plumifera							
Euchaeta sp							
Euchaeta marina							
Euchaeta japoncia							
Corycaeus venustus							
Cory. sp			1	2	2		
Centropages sp							
Cent. abdominalis							
Candacia sp						+	
Can. pachydactylca							
Temora sp							
Parathemisto sp	+	+	1	2		4	+
Hyperia sp							
Evadne sp							
Podon Schmackeri							
Noctiluca scintillans							
Pyrocystis noctiluca	2						
Sagitta sp		1		+	2		+
Oikopleura sp	1		1	+		+	
Ostracoda sp		+	+		+		
Ceratium sp							
Doliolum sp							
Euphausia sp		+	+	+	+		
Euphausia larva				1	5		
Lucifer raynaudii							
Planktomya sp							
Medusea sp						+	
Brachyura larva							
Salpa sp	+						
Muggiaea sp							
Pelagic egg							
Copepoda egg							
Shrimp larva							
Amphipoda larva							
Polychaeta larva							
Fish larva							
Scale							

July				August						
07	08	09	10	04	05	06	07	08	09	10
31	31	31	31	20	20	20	20	20	20	20
0934	0627	0330	0012	1018	1116	0908	1450	1742	2030	2310
2.0	1.5	2.5	2.5	0.8	1.0	3.0	1.5	1.5	1.5	1.0
—	—	—	50	50	50	50	50	50	50	50
50	50	50	50	50	50	50	50	50	50	50
51	31	49	44	33	38	26	52	33	26	32
—	49	43	51	10	—	117	21	11	4	16
43	15	22	23	20	20	11	32	21	14	16
	+	+	2			3		+	1	
3					11	7	10	4	3	4
		4	5							
		1				2				
2	3				1	2			+	1
		2	2	5			4	3	1	1
2		1								
										3
			+		+	+	1	+	+	1
+										
	1	+	1			+	2			2
	1	1	1							
	1	8	7							
1	2	2			+	1	+	+	+	
6	5	5	2	2	4		3		4	2
	+		1	+						
	3	+						2	+	+
		1	+							
1				1				1	3	1
			+							1
		2						+	+	
			+							
+			+	5	2			+		+
								2		
	+									
			+							
	+		+					+	+	+

Month	September						
Station	04	05	06	07	08	09	10
Date	28	28	28	28	28	29	29
Time	1400	1535	1745	2030	2315	0150	0420
Volume(cc)	0.2	1.0	6.0	7.0	6.0	3.5	4.0
Rate of dilute	—	50	50	50	50	50	50
Collected depth	50	50	50	50	50	50	50
Zooplankton Organisms	28	37	30	34	31	27	32
Phytoplankton Organisms	12	—	7	7	3	7	—
Zooplankton							
Copepoda sp	8	20	10	10	15	14	9
Copepoda larva		+					1
Calanus sp		5	6	9	3		9
Calanus finmarchicus							
Calanus plumchrus							
Paracalanus sp							
Eucalanus sp							
Pseudocalanus elongatus							
Pseu. sp							
Rhincalanus sp							
Oithona sp	6	4	1		4		
Oithona plumifera							
Euchaeta sp							
Euchaeta marina							
Euchaeta japonia							
Corycaeus venustus							
Cory. sp	2		2	1		1	1
Centropages sp							
Cent. abdominalis							
Candacia sp			3	+		1	3
Can. pachydactyta							
Temora sp							
Parathemisto sp		+	+		+	+	+
Hyperia sp							
Evadne sp			+				
Podon Schmackeri							
Noctiluca scintillans							
Pyrocystis noctiluca							
Sagitta sp	2	2	+	1	3	4	
Oikopleura sp	4	4	2	10	4		2
Ostracoda sp				2		2	1
Ceratium sp	+		3	+		4	3
Doliolum sp	6	2	3		1		
Euphausia sp							
Euphausia larva						+	+
Luc fer raynaudii					1		+
Planktomya sp			+		+		
Medusea sp	+			1			
Brachyura larva					+		
Salpa sp							
Muggiaea sp							
Pelagic egg							
Copepoda egg	+				+ +		
Shrimp larva							1
Amphipoda larva							2
Polychaeta larva		+		+	+		
Fish larva		+			+		
Scale							

November						
04	05	06	07	08	09	10
1	1	1	1	1	1	1
1015	1120	1250	1525	1735	1955	2235
1.5	1.0	2.0	1.0	1.0	3.0	1.0
50	—	50	50	50	—	50
50	50	50	50	50	50	50
30	45	27	20	28	18	23
1	—	1	354	171	180	320
10	33	16	12	12	8	7
		2		+	+	
			2			
10	5	1		6		1
	1					
7		+	+			
1	+					
2	4	1	1	2		3
	1	5	2	1		1
			3	5	10	10
				1		
			+	1		+
			+	+	+	1
	1	1				
		1				
					+	

Month	June						
Station	04	05	06	07	08	09	10
Date	21	21	21	21	21	21	21
Time	0615	0653	0918	1135	1419	1650	1920
Volume(cc)	3.0	2.7	0.8	1.0	2.0	2.0	6.0
Rate of dilute	50	100	—	100	50	50	50
Collected depth	50	50	50	50	50	50	50
Zooplankton Organisms	47	25	74	36	59	30	36
Phytoplankton Organisms	—	—	20	—	6	1	—
Phytoplankton							
Chaetoceros spp					4		
Ch. affinis							
Ch. borealis							
Ch. didymus							
Ch. decipiens							
Ch. coarctatus							
Ch. densus							
Ch. setoensis							
Ch. peruvianus							
Ch. socialis							
Ch. constrictus							
Ch. convoltus							
Ch. furca							
Rhizosolenia sp			4				
Rh. styliformis					1		
Rh. Stolterfothii							
Rh. hebetata							
Rh. Schrubsolei							
Rh. alata							
Rh. indica							
Rh. calcar-avis							
Rh. setigera					1		
Skeletonema costatum			16				
Biddulphia sinensis							
Biddulphia aurita							
Thalassiothrix Frauenfeldii							
Thalassionema nitzschioides							
Thalassiothrix longissima						1	
Coscinodiscus sp			+				
Stephanopyxis palmeriana							
Coscinodiscus Janischii							
Bacteriastrum varians							
Asterionella japonica							
Hemialus Hauckii							
Lauderia borealis							
Ditylium Brightwellii							
Eucampia zoodiacus							
Leptocylindrus danicus							
Climacodium sp							
Pleurosigma affine							
Paralia sulcata							
Dactyliosolen tenuis							
Actynoptychus sp							
Melosira sp							
Nitzschia seriata							
Trichodesmium sp							
Cerataulina Bergonii							
Diatoma sp							

July				August						
07	08	09	10	04	05	06	07	08	09	10
31	31	31	31	20	20	20	20	20	20	20
0934	0627	0330	0012	1018	1116	0908	1450	1742	2030	2310
2.0	1.5	2.5	2.5	0.8	1.0	3.0	1.5	1.5	1.5	1.0
—	—	—	50	50	50	50	50	50	50	50
50	50	50	50	50	50	50	50	50	50	50
51	31	49	44	33	38	26	52	33	26	32
—	49	43	51	10	—	117	21	11	4	16
+	25	25	30			53	5	3		
	30					40	5			
						15				
	10	15	13	10				8	4	10
					+	7	3			
	1									
	+		+		+	4				
		3			+					6
	3	+	3							
	+						8			
	+									
			5							

Month	September						
Station	04	05	06	07	08	09	10
Date	28	28	28	23	28	29	29
Time	1400	1535	1745	2030	2315	0150	0420
Volume(cc)	0.2	1.0	6.0	7.0	6.0	3.5	4.0
Rate of dilute	—	50	50	50	50	50	50
Collected depth	50	50	50	50	50	50	50
Zooplankton Organisms	28	37	30	34	31	27	32
Phytoplankton Organisms	12	—	7	7	3	7	—
Phytoplankton							
Chaetoceros spp		+	3	+		+	
Ch. affinis							
Ch. borealis							
Ch. didymus							
Ch. decipiens							
Ch. coarctatus	5						
Ch. densus							
Ch. setoensis							
Ch. peruvianus							
Ch. socialis							
Ch. constrictus							
Ch. convoltus							
Ch. furca							
Rhizosolenia sp	2	+	4	5	3	7	+
Rh. styliformis							
Rh. Stolterfothii							
Rh. hebetata							
Rh. Schrubsolei							
Rh. alata							
Rh. indica							
Rh. calcar-avis							
Rh. setigera							
Skeletonema costatum							
Biddulphia sinensis							
Biddulphia aurita							
Thalossiothrix Frauenfeldii	5						
Thalassionemanitzschioides							
Thalassiothrix longissima							
Coscinodiscus sp							
Stephanopyxis palmeriana							
Coscinodiscus Janischii							
Bacteriastrum varians							
Asterionella japonica							
Hemialus Hauckii							
Lauderia borealis							
Ditylium Brightwellii							
Eucampia zoodiacus							
Leptocylindrus danicus							
Climacodium sp							
Pleurosigma affine							
Navalia sulcata							
Dactyliosolen tenuis							
Actynoptychus sp							
Melosira sp							
Nitzschia seriata							
Trichodesmium sp				2		+	
Cerataulina Bergonii							
Diatoma sp							

November						
04	05	06	07	08	09	10
1	1	1	1	1	1	1
1015	1120	1250	1525	1735	1955	2235
1. 5	1. 0	2. 0	1. 0	1. 0	3. 0	1. 0
50	—	50	50	50	—	50
50	50	50	50	50	50	50
30	45	27	20	28	18	23
1	—	1	354	171	180	320
			50	20	30	25
					25	50
					15	
					10	25
						15
1		1	30	10		15
			75	50	40	100
			3	1		
			75		10	25
			40	25	15	15
			40	50	25	50
					+	
					10	
			1			
			10			
			15			
			15	15		

E. 103선 부유생물 조사성적

Plankton Data, Line 103 (Vertical haul) 1961

Month	June					July					
Station	04	05	06	07	08	04	05	06	08	09	10
Date	20	20	20	20	19	30	30	30	30	30	30
Time	1020	0915	0740	0540	0316	0730	0835	1025	1540	1805	2134
Volume(cc)	2.5	1.5	0.8	3.5	2.0	0.1	0.8	—	1.5	0.7	2.5
Rate of dilute	50	50	50	50	50	—	50	—	—	100	—
Collected depth	50	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	40	35	61	39	32	57	32	31	58	58	45
Phytoplankton Organisms	—	—	1	—	1	—	5	23	2	49	—
Zooplankton											
Copepoda sp	25	20	33	25	20	26	20	20	39	13	17
Copepoda larva					1		+	1	1	3	
Calanus sp	11	11	18	10	2			3			2
Cal. finmarchicus						6	3		5		
Cal. plumchrus											
Paracalanus sp											
Eucalanus sp											
Pseudocalanus elongatus											
Pseu. sp											
Rhincalanus sp											
Oithona sp											
Oithona plumifera	3	2	8	2	1		7	4	6		
Euchaeta sp											
Euchaeta marina											
Euchaeta japonica											
Corycaeus venustus											
Cory. sp					1				1	5	
Centropages sp											
Candacia sp											
Temora sp											
Parathemisto sp	+	1	1	1		+	+	1	+		
Hyperia sp					+					+	
Penilia sp							1	1		+	+
Evadne sp					4						1
Podon Schmackeri										2	1
Noctiluca scintillans					1					31	11
Sagitta sp					+	+	+	+	+	2	
Oikopleura sp	1	1	1	1	1			1		1	3
Ostracoda sp					1						
Ceratium sp		+		+	+	+					1
Doliolum sp											
Euphausia larva											
Lucifer raynaudii											
Planktomya sp										1	
Acanthometron sp											
Medusea sp											1
Brachyura larva											+
Lingula larva											
Salpa sp									2		
Muggiaea sp										+	
Pelagic egg					+		1		4		
Copepoda egg						+					
Shrimp larva											+
Polychaeta larva											
Fish larva										+	3
Fish egg											5
Oithona plumifera						25					
Conchoecia sp											

August					
04	05	06	07	08	10
21	21	21	21	21	21
1743	1604	1510	1317	1040	0710
1.0	1.0	1.0	1.5	2.0	1.5
50	50	50	50	50	50
50	50	50	50	50	50
31	28	35	31	38	42
2	3	1	—	23	6
15	15	18	15	14	18
				1	1
9	5	7	4	17	6
1	3		2		1
1		2			3
					1
		+		+	
					+
				+	4
	1		1	1	+
5	3	5	3	2	+
	+				1
			1	1	
				1	1
		1			
			5		
	1	+		+	6
+				1	
		2			

September					
04	05	06	07	08	09
29	29	29	29	29	29
2345	2121	1915	1710	1420	1150
1.0	3.5	4.0	6.0	2.5	2.5
50	50	50	05	50	50
50	50	50	50	50	50
40	33	36	21	34	29
—	—	1	5	—	35
17	17	13	11	17	14
1					+
5	5	5	2	5	3
4	3	3		+	1
3	1	3	1	2	
					1
	1		+	+	
		1			
4	+	1	+	2	1
6	2	6	7	5	6
				1	2
	1	1	+	+	
+					
+	1	+	+		+
				1	+
+	1	+			
+					
	1	3	+	1	
+			+		
	+				1

October		
04	05	06
31	31	31
1120	1200	1350
4.0	5.0	2.5
50	50	50
50	50	50
29	35	45
8	—	—
17	29	33
3	1	
		1
3	2	2
1		
		2
+		
1	2	5
1	1	2
1		
		+
	+	
1		
+	+	

Month	June					July					
Station	04	05	06	07	08	04	05	06	08	09	10
Date	20	20	20	20	19	30	30	30	30	30	30
Time	1020	0915	0740	0540	0316	0730	0835	1025	1540	1805	2134
Volume(cc)	2.5	1.5	0.8	3.5	2.0	0.1	0.8	—	1.5	0.7	2.5
Rate of dilute	50	50	50	50	50	—	50	—	—	100	—
Collected depth	50	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	40	35	61	39	32	57	32	31	58	58	45
Phytoplankton Organisms	—	—	1	—	1	—	5	23	2	49	—
Phytoplankton											
Chaetoceros spp							5	15		15	+
Ch. affinis										8	
Ch. borealis											
Ch. didymus											
Ch. decipiens											
Ch. coarctatus											
Ch. densus											
Ch. setoensis											
Ch. peruvianus											
Ch. socialis											
Ch. constrictus											
Ch. convoltus											
Ch. furca											
Rhizosolenia sp					1				2	25	+
Rh. styliformis											
Rh Stolterfothii											
Rh. hebetata											
Rh. Schrubsolei											
Rh. alata											
Rh. indica											
Rh. calcar-avis											
Rh. setigera											
Skeletonema costatum					+			8			
Biddulphia sinensis											
Biddulphia aurita											
Thalassiothrix Frauenfeldii											
Thalassionema nitzschioides											
Thalassiothrix longissima											
Coscinodiscus sp			1		+					1	+
Cosc. Janischii											
Stephanopyxis palmeriana											
Bacteriastrum varians											
Asterionella japorica											
Hemialus Hauckii											
Lauderia borealis											
Diatoma sp											

August						September						October		
04	05	06	07	08	10	04	05	06	07	08	09	04	05	06
21	21	21	21	21	21	29	29	29	29	29	29	31	31	31
1743	1604	1510	1317	1040	0710	2345	2121	1915	1710	1420	1150	1120	1200	1350
1. 0	1. 0	1. 0	1. 5	2. 0	1. 5	1. 0	3. 5	4. 0	6. 0	2. 5	2. 5	4. 0	5. 0	2. 5
50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
31	28	35	31	38	42	40	33	36	21	34	29	29	35	45
2	3	1	—	23	6	—	—	1	5	—	35	8	—	—

F. 102선 부유생물 조사성적

Plankton Data, Line 102 (Vertical haul) 1961

Month	June					July					
Station	05	06	07	08	09	05	06	07	08	09	10
Date	19	19	19	19	19	28	28	28	28	28	28
Time	1120	1230	1540	1830	1920	0810	0921	1117	1420	1710	1945
Volume(cc)	2.0	2.0	1.0	2.0	3.5	0.5	1.5	3.5	5.0	1.5	2.5
Rate of dilute	—	50	—	—	50	50	—	—	50	—	—
Collected depth	50	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	46	40	56	96	—	27	61	56	30	68	65
Phytoplankton Organisms	—	2	5	8	—	—	—	3	53	87	27
Zooplankton											
Copepoda sp	25	25	35	45	+	14	12	33	16	30	15
Copepoda larva			+	2				+	2	2	+
Calanus sp							3	11		8	
Cal. finmarchicus	18	11	10	5							
Cal. plumchrus											
Paracalanus sp											
Eucalanus sp		2								3	1
Pseudocalanus elongatus											
Pseu. sp											
Rhincalanus sp											
Oithona sp	2							1			
Oithona plumifera		2	4			9	3				
Euchaeta sp											
Corycaeus sp			3	3				2	1	1	
Centropages sp				1							
Candacia sp											
Acartia sp											
Parathemisto sp		+	1			2	11	1	1		
Hyperia sp											
Penilia sp				1					2		25
Evadne sp			1	5	+					1	
Calycophora sp			+								
Noctiluca scintillans								+	1	12	2
Sagitta sp	+						1	2		1	1
Oikopleura sp	+	+	+			1		1	3	3	1
Ostracoda sp										2	1
Ceratium sp		+						+	+	1	15
Doliolum sp									+	3	1
Euphausia sp						+		+			
Euphausia larva				8							
Lucifer raynaudii									+		
Planktomya sp									+		+
Acanthometron sp											
Medusea sp											
Brachyura larva	1		+								
Lingula larva											
Ophiopluteus larva										1	
Salpa sp	+ +							1			
Muggiaea sp									1		+
Pelagic egg			2	25				+	2		
Copepoda egg						1					+
Shrimp larva								1	+	+	+
Fish egg								3			
Fish larva				1					+		
Amphipoda larva						+	4				
Amphipoda egg							27				
Podon Schmackeri									1		3
Polychaeta larva											

September						October				November					
05	06	07	08	09	10	05	06	07	08	05	06	07	08	09	10
22	22	22	22	22	22	5	7	9	7	21	21	21	21	21	21
1215	1330	1530	1757	2025	2253	0930	0920	1510	1130	125	137	1450	1710	0930	2150
0. 5	1. 5	0. 7	3. 0	1. 0	5. 5	3. 5	3. 5	5. 0	2. 5	4. 0	1. 0	3. 5	3. 5	4. 0	6. 0
--	50	50	50	—	50	50	50	50	—	50	100	100	100	100	100
—	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
43	40	49	40	36	29	46	35	33	36	14	16	7	16	18	14
6	31	5	1	—	11	—	1	35	7	65	97	151	198	205	240
21	22	23	23	21	16	27	19	16	23	3	9	5	4	7	7
		2	2	2				+					2	1	
14		11	7	2	3	7	7	5	3	1	2		3		7
	7	7													
			+			3	3	1						2	
2	3			4	1										
1	3		2			1		1				2			
								2					2		
				1											
						1									
	+			+			+								
					1										
		1	1	+	+						1				
+															
										1			1	1	
2	+	1	+	2	4	4	1	+	+	8					
2	1	+		3	1	1	4	4	7		1			2	1
	1			+	1	+	1								
	1	+		+	+		1	2	3	1	2		1	5	3
	+														
								+					1		1
	2	1	2	1	+			+			1				1
				+	+		+	+					1		
								+							
			1		+										
1							+								
						1	+								
								2							
		2	2	+	1										
+	+	+			1	+	3								
						+									
					+										
		1	+		+	1	+								

Month	June					July					
Station	05	06	07	08	09	05	06	07	08	09	10
Date	19	19	19	19	19	28	28	28	28	28	28
Time	1120	1230	1540	1830	1920	0810	0921	1117	1420	1710	1945
Volume(cc)	2.0	2.0	1.0	2.0	3.5	0.5	1.5	3.5	5.0	1.5	2.5
Rate of dilute	—	50	—	—	50	50	—	—	50	—	—
Collected depth	50	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	46	40	56	96	—	27	61	56	30	68	65
Phytoplankton Organisms	--	2	5	8	—	—	—	3	53	87	27
Phytoplankton											
Choatoceros spp									15	53	
Ch. affinis				7					12	20	15
Ch. borealis											
Ch. didymus									8		
Ch. decipiens											
Ch. coarctatus											
Ch. densus											
Ch. setoensis											
Ch. peruvianus											
Ch. socialis											
Ch. constrictus											
Ch. convoltus											
Ch. furca											
Rhizosolenia sp			2	1	+			3	6		7
Rh. styliformis		2								11	
Rh. Stolterfothii											
Rh. hebetata											
Rh. Schrubsolei											
Rh alata											
Rh. indica											
Rh. calcar-avis											
Rh. setigera											
Skeletonema costatum									8		
Biddulphia sinensis										+	
Biddulphia aurita											
Thalassiothrix Frauenfeldii											
Thalassionema nitzschioides			3					+		3	
Thalassiothrix longissima											
Coscinodiscus sp	+		+		+	+	1	+		1	
Cos. Janischii											
Stephanopyxis palmeriana								+	3	+	
Bacteriastrum varians											
Asterionella japonica											
Hemialus Hauckii											
Lauderia borealis											
Cerataulina sp											
Ditylium Brightwellii											
Eucampia zoodiacus											
Leptocylindrus danicus											
Climacodium sp											
Pleurosigma affine											
Paralia sulcata											
Dactyliosolen tenuis											5
Actynoptychus sp		+				+					
Melosira sp											
Guinardia sp											
Corethron criophilum											
Diatoma sp											

September						October				November					
05	06	07	08	09	10	05	06	07	08	05	06	07	08	09	10
22	22	22	22	22	22	5	7	9	7	21	21	21	21	21	21
1215	1330	1530	1757	2025	2253	0930	0920	1510	1130	125	137	1450	1710	1930	2150
0. 5	1. 5	0. 7	3. 0	1. 0	5. 5	3. 5	3. 5	5. 0	2. 5	4. 0	1. 0	3. 5	3. 5	4. 0	6. 0
—	50	50	50	—	50	50	50	50	—	50	100	100	100	100	100
—	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
43	40	49	40	36	29	46	35	33	36	14	16	7	16	18	14
6	31	5	1	—	11	—	1	35	7	65	97	151	198	205	240
	10						10	+		5	25	35	25	55	40
	8										10	10	5	25	25
										10					
				5				10			5	5			
											10				15
											5				
		2	+		6		1	15	7	5	5	35			
5	10										20	15	15	50	
												25	50	25	50
										25					
											1	3		5	
												10			
												5	8		25
	2	3						+					25		
	1		1								20	25	25	25	50
										5					+
													5		
												5			
														10	5
										15					
										5					
															10
											1				
												3	5	10	20

G. 209선 부유생물 조사성적

Plankton Data, Line 209 (Vertical haul) 1961

Month	July							
Station	04	05	06	07	08	09	04	05
Date	29	29	29	29	29	29	23	23
Time	1250	1025	0815	0610	0319	0025	1613	1442
Volume(cc)	1.0	2.0	3.0	4.5	3.5	3.0	2.5	2.5
Rate of dilute	—	—	50	—	50	—	50	—
Collected depth	50	50	50	50	50	50	50	50
Zooplankton Organisms	33	40	60	28	44	37	41	48
Phytoplankton Organisms	2	36	66	147	38	66	8	5
Zooplankton								
Copepoda sp	21	13	15	5	10	14	13	25
Copepoda larva			3	+		+		3
Calanus sp			3		3		23	6
Cal. finmarchicus	4	4				2		
Cal. plumchrus								
Paracalanus sp								
Eucalanus sp			2		2			
Oithona sp					3			
Oithona plumifera	5	4	2					
Pseudocalanus elongatus								
Pseudo. sp								
Euchaeta sp								
Euchaeta japonica								
Corycaeus sp	1	1			3	1		2
Cory. venustus								
Centropages sp								
Cent. abdominalis								
Candacia sp		2						
Candacia bipinnata								
Temora sp								3
Parathemisto sp	1	1			+	+	+	+
Penilia sp			11	14	12	7		
Evadne sp		+				+		1
Podon Schmackeri		+	+	1	+	2		
Calycophora sp								1
Noctiluca scintillans		6	10	1	1	7		
Sagitta sp		2	2		1			+
Oikopleura sp		1	+		2	1	2	1
Ostracoda sp								1
Ceratium sp	1		2	5	+	+		+
Doliolum sp		4	2		1	3		
Euphausia sp								
Euphausia larva								
Lucifer raynaudii		+	2	2			1	+
Planktomya sp		+	+					
Acanthometron sp				+				
Medusea sp			2	+	2			
Brachyura larva					1		+	
Lingula larva								
Polychaeta sp								
Alima larva								
Pelagic egg	+	1	2				2	5
Copepoda egg			2	+	2		++	
Shrimp larva		+			+			
Fish egg		1						
Globigerina sp								
Ophiopluteus larva					1			
Fish larva								

August						September					
06	07	08	09	10	11	04	05	06	07	08	09
23	23	23	23	23	23	22	22	22	22	22	22
1240	0954	0735	0525	315	0056	1220	1122	1005	0812	0525	0235
2. 5	3. 5	3. 0	2. 0	4. 0	0. 8	1. 0	2. 0	4. 0	0. 1	0. 5	1. 0
50	50	—	50	50	50	50	50	100	—	100	50
50	50	50	50	50	50	50	50	50	50	50	50
40	34	31	31	25	29	36	34	14	—	10	22
2	60	15	9	10	—	—	20	160	—	645	282
21	18	15	15	14	21	21	18	5	+	5	6
	1			2	+						
7	8		5		3	7	6	2			1
		2									
			1				3				
2	1	1		1		7				2	3
4	1	3				1					
		3				1	2			+	
			5	1							
		1	+		+	+					
				2							
	1		+	+	1						
+			+	+							
2	+	+	2	2	2	4	2	+			+
1	+	2	1	2	+			+	+	+	1
+		+		+	+		1				
	2	3	+	+	1			5		3	7
+											
								2			
							+				
+	1	+	1	+	1		2				1
		+	+ +	1		1					1
			1	+							
								+			1
							+				
			+	+							
											1
+	+				+						
1		+	+								
+		1									
	1										
2											

Month	July							
Station	04	05	06	07	08	09	04	05
Date	29	29	29	29	29	29	23	23
Time	1250	1025	0815	0610	0319	0025	1613	1442
Volume(cc)	1.0	2.0	3.0	4.5	3.5	3.0	2.5	2.5
Rate of dilute	—	—	50	—	50	—	50	—
Collected depth	50	50	50	50	50	50	50	50
Zooplankton Organisms	33	40	60	28	44	37	41	48
Phytoplankton Organisms	2	36	66	147	38	66	8	5
Phytoplankton								
Chaetoceros spp			30	25	+	15	5	+
Ch. affinis		15		16		15		
Ch. Lorenzianus					3	15		
Ch. borealis								
Ch. didymus		8						
Ch. decipiens								
Ch. coarctatus					19			
Ch. densus								
Ch. setoensis								
Ch. Frichei								
Ch. pervianus								
Ch. constirctus								
Ch. convoltus								
Ch. furca								
Rhizosolenia sp	2	6	30	104	15	15		2
Rh. styliformis							3	
Ph. Stolterfothii								
Rh. hebetata								
Rh. Schrubsolei								
Rh. alata								
Rh. indica								
Ph. setigera								
Rh. ca'car-avis								
Skeletonema costatum					1			
Biddulphia sinensis						+		
Biddulphia aurita								
Thalassiothrix Frauenfeldii								3
Thalassionema nitzschioides						5		
Thalassiothrix longissima								
Nitzschia seriata								
Nit. longissima								
Coscinodiscus sp				+				
Cos. Janischii								
Stephanopyxis palmeriana		+	5			+		
Bacteriastrum varians				2				
Ditylium Brightwellii			1			1		
Leptocylindrus danicus								
Eucampia zoodiacus		6	+					
Pleurosigma affine								
Paralia sulcata								
Dactyliosolen tenuis								
Trichodesmium sp								
Actinoptychus sp		1						
Melosira sp								
Guinardia sp						+		
Corethron criophilum								
Diatoma sp								
Climacodium sp								

August					
06	07	08	09	10	11
23	23	23	23	23	23
1240	0954	0735	0525	315	0055
2. 5	3. 5	3. 0	2. 0	4. 0	0. 8
50	50	—	50	50	50
50	50	50	50	50	50
40	34	31	31	25	29
2	60	15	9	10	—
+		10	5		
	30	+			
	18				
2	4	5	4	10	
	5				
	3				
		+			
	+				

September					
04	05	06	07	08	09
22	22	22	22	22	22
1220	1122	1005	0812	0525	0235
1. 0	2. 0	4. 0	0. 1	0. 5	1. 0
50	50	100	—	100	50
50	50	50	50	50	50
36	34	14	—	10	22
—	20	160	—	645	282
	5	40	+	250	100
					25
	5	10		150	
		15			
		10	+	15	
	10	10			
		8		100	150
		5			
		2	+		1
				5	
		5	+	5	
				40	
	+			50	
		35			
					1
		10		10	
				10	
		10			5
				10	

H. 208 선부유생물 조사성적

Plankton Data, Line 208 (Vertical haul) 1961

Month	January			March				
Station	01	02	03	01	02	03	04	05
Date	1. 31	1. 31	13. 1	10	10	10	10	10
Time	755	095	1250	0700	0300	0925	1045	010
Volume(cc)	6. 1	2. 8	1. 0	1. 7	10. 2	3	4. 5	4. 0
Rate of dilute	10	10	20	10	20	10	20	20
Collected depth	50	50	50	50	50	50	50	50
Zooplankton Organisms	67	19	8	116	45	30	90	67
Phytoplankton Organisms	30	69	218	34	89	53	186	178
Zooplankton								
Copepoda sp	3	4	2	7				2
Copeoda larva	1		1	3	10	2	32	29
Calanus sp	2	1		42	2	1	1	8
Cal. finmarchicus								
Paracalanus sp	48	10	1	43	27	3	8	5
Eucalanus sp								
Pseudocalanus sp								
Oithona sp	3	1		1				
Oithona plumifera	3	3				2	1	1
Euchaeta sp								
Corycaeus venustus	1						2	
Corycaeus sp				2	1	1		
Candacia sp								
Metridia sp								
Temora sp								
Parafavella gigantia								
Parathemisto sp								
Hyperia sp								
Evadne sp								
Penilia sp								
Calycophora sp								
Noctiluca sp			4			15	9	2
Pyrocystis noctiluca								
Sagitta sp	1							
Peridinium sp								
Oikopleura sp	2					1	1	
Ostracoda sp	2				1			
Ceratium sp				1				
Doliolum sp								
Ophiopluteus sp	1							1
Euphausia sp				1		2	29	15
Tintinnopsis sp				1				
Lucifer raynaudii								
Planktomya sp								
Acanthometron sp								
Medusea sp								
Brachyura larva				1				
Lingula larva								
Polychaeta sp								
Cosmarium sp					1	1		
Alima larva								
Muggiaea sp						2		
Pelagic egg								
Copepoda egg				1	3		7	4
Shrimp larva								
Fish larva								
Shell larva				18				
Fish egg								
Engraulis japonica egg								

	June								
06	01	02	04	05	06	11	12	13	14
10	18	18	18	18	19	18	18	18	18
1335	0113	0220	0600	0750	0935	1210	1420	1720	1846
5. 1	2. 0	2. 0	1. 8	2. 0	1. 3	2. 6	2. 5	0. 1	1. 5
20	50	50	50	50	50	50	—	25	50
50	—	50	—	—	—	—	—	—	—
62	20	58	31	86	60	63	60	2	30
109	1380	81	34	26	403	26	400	1	1
	12	48	7	23	10	9	23	2	27
17	+			1					
14									
20									
1									
2									
2									
				1					1
1		2							
		2		1					
				3	+	1			
	+								
	+	2						+	1
			4	7	19	9	5		
			6	7	7	3	21		
	+		5	33	10	32	1		
									1
	+	+		+	+	+	1		
	+			1		+		+	+
	8	1	3		9		8		
			+	1					
5		+	6	7	5	9			
				1					
							1		
			+	+		+	+		
			+		+				
							+		
		3	+		+	+		+	

Month	July						August		
Station	05	06	07	08	09	10	01	02	03
Date	24	24	24	24	24	24	24	24	24
Time	1435	1635	1810	1950	2130	2310	355	0510	0708
Volume(cc)	4.0	8.0	6.0	6.0	6.0	2.5	6.5	4.5	4.5
Rate of dilute	—	50	50	—	—	50	100	50	50
Collected depth	50	50	—	50	50	50	50	50	50
Zooplankton Organisms	64	51	6	127	52	35	5	27	20
Phytoplankton Organisms	17	—	23	7	—	14	219	217	137
Zooplankton									
Copepoda sp	8	4	5	3	4	16	5	15	10
Copepoda larva		+					+		1
Calanus sp			1						
Cal. finmarchicus	2					5		2	1
Paracalanus sp									
Eucalanus sp									
Pseudocalanus sp									
Oithona sp									
Oithona plumifera									
Euchaeta sp									
Corycaeus venustus									
Corycaeus sp		1						1	
Candacia sp						3			
Metridia sp									
Temora sp									1
Parafavella gigantia									
Parathemisto sp							+		
Hyperia sp									
Evadne sp				+	+	2	+	2	1
Penilia sp	45	35		35	26	3			
Calycophora sp									
Noctiluca scintillans									
Pyrocystis noctiluca									
Sagitta sp		1		1	1	+	+	1	
Peridinium sp						2			
Oikopleura sp	2	1		+	+			2	4
Ostracoda sp						+	+		
Ceratium sp	5	9			1	+		2	+
Doliolum sp	+			1	1	2			
Ophiopluteus sp						+			
Euphausia sp							+		
Tintinnopsis sp									
Lucifer raynaudii	2	+		1	1	+		2	1
Planktomya sp				1	+				
Acanthomelron sp					5	+			
Medusea sp				2	2	+			
Brachyura larva					1	+			
Lingula larva									
Polychaeta sp				+		1			
Cosmarium sp									
Alima larva									
Muggiaea sp									
Pelagic egg							+	+	1
Copepoda egg									
Shrimp larva						+			
Fish larva				69					
Shell larva									
Fish egg				14		1			
Engraulis japonica egg									

August				October						
04	05	06	09	01	02	03	04	05	06	07
24	24	24	24	22	22	22	22	22	22	23
0910	1135	1324	1505	1515	1620	1745	1935	2100	2255	030
—	1.5	1.0	1.0	1.5	4.0	1.0	1.0	6.0	3.0	15.0
50	50	50	50	50	50	50	50	50	50	100
50	—	50	50	50	50	50	50	50	50	50
22	19	24	18	33	41	40	35	42	23	40
13	56	51	36	2	20	29	6	68	6	130
8	7	20	9	23	28	20	21	17	14	28
1	3					3	1	3	1	
3				5	5	5	3	5	3	
	2									
			1			1	1	1	1	3
	1				1					
						1		1		
2							1		1	
+				1	2	6	2	6		
1				1	1		+			
		+								
1	+	+								
	1									
2	+	+	2	5	+	1	+	2	1	1
2	3	2		+	1	1	1	2		1
			1							
+	1	1	3		1	1	3	3		5
+		1								
						1		1		1
2				2	+		+		+	
	+	+	+	1	1		+	+	1	+
							1	+	1	+
							1	1		1
			+							
		+				+	+		+	
					1				+	
										+
						+				
+		+	2							
									+	
	1									

Month	January			March				
Station	01	02	03	01	02	03	04	05
Date	1. 31	1. 31	1. 31	10	10	10	10	10
Time	755	095	1250	0700	0800	0925	1045	010
Volume(cc)	6. 1	2. 8	1. 0	1. 7	10. 2	3	4. 5	4. 5
Rate of dilute	10	10	20	10	20	10	20	20
Collected depth	50	50	50	50	50	50	50	50
Zooplankton Organisms	67	19	8	116	45	30	90	67
Phytoplankton Organisms	30	69	218	34	89	53	186	178
Phytoplankton								
Chaetoceros spp		17	25					
Ch. affinis								
Ch. Lorenzianus								
Ch. borealis								
Ch. didymus								
Ch. decipiens								
Ch. coarctatus								
Ch. densus								
Ch. setoensis								
Ch. Frichei								
Ch. peruvianus								
Ch. socialis								
Ch. constrictus								
Ch. convoltus								
Rhizosolenia sp			4					
Rh. styliformis								
Rh. Stolterfothii								
Rh. hebetata								
Rh. Schrubsolei								
Rh. alata								
Rh. indica								
Skeletonema costatum								
Biddulphia sinensis	10	18	11		9	2		
Biddulphia aurita								
Thalassiothrix Frauenfeldii								
Thalassionema nitzschioides								
Thalassiothri longissima								
Thalassiosira gravida								
Nitzschia seriata								
Nitzschia longissima								
Coscinodiscus sp	9	9	15	32	67	43	186	173
Coscinodiscus Janischii								
Stephanopyxis sp								
Bacteriastrum varians			2					
Asterionella japonica	3	8	5			8		5
Lauderia borealis		6	51	2	8			
Cerataulina sp		2	11					
Ditylium Brightwellii								
Leptocylindrus danicus								
Eucampia zoodiacus			55					
Climacodium sp								
Paralia sulcata			3					
Dactyliosolen tenuis								
Trichodesmium sp								
Actynoptychus sp	8							
Melosira sp		9	36		5			
Rhizosolenia calcar-avis								
Rh. setigera								

	June								
06	01	02	04	05	06	11	12	13	14
10	18	18	18	18	19	18	18	18	18
1335	0113	0220	0600	0750	0935	1210	1420	1720	1846
5. 1	2. 0	2. 0	1. 8	2. 0	1. 3	2. 6	2. 5	0. 1	1. 5
20	50	50	50	50	50	50	—	25	50
50	—	50	—	—	—	—	—	—	—
62	20	58	31	86	60	63	60	2	30
109	1380	81	34	26	403	26	400	1	1
		1					67		
	4						19		
			5				52		
			1	15	4	5	20		
		1	3	3	1		39		
				5	11				
			1			1	1		
	16	42	5	1	6	3	14	1	
					2		4		
						3	2		
	1. 224	17	9						
	4	2	2	1			3		
	36						9		
	4		5	1	1	5	28		
	92	2					78		
109	+	1					2		1
		15					29		
							12		
			3		376	6	6		
							6		
					2	3	9		

Month	July						August		
Station	05	06	07	08	09	10	01	02	03
Date	24	24	24	24	24	24	24	24	24
Time	1435	1635	1810	1950	2130	2310	355	0510	0708
Volume(cc)	4.0	8.0	6.0	6.0	6.0	2.5	6.5	4.5	4.5
Rate of dilute	—	50	50	—	—	50	100	50	50
Collected depth	50	50	—	50	50	50	50	50	50
Zooplankton Organisms	64	51	6	127	52	35	5	27	20
Phytoplankton Organisms	17	—	23	7	—	14	219	217	137
Phyto-plankton									
Chaetoceros spp							73	75	35
Ch. affinis			3				40	40	25
Ch. Lorenzianus			5					10	
Ch. borealis							7		6
Ch. didymus			+			4			
Ch. decipiens									
Ch. coarctatus	5		+						
Ch. densus									
Ch. setoensis									
Ch. Frichei									
Ch. peruvianus									
Ch. socialis									
Ch. constrictus									
Ch. convoltus									
Rhizosolenia sp			15	5		10	8	5	13
Rh. styliformis	11								
Rh. Stolterfothii									
Rh. hebetata									
Rh. Schrubsolei									
Rh. alata									
Rh. indica									
Skeletonema costatum									
Biddulphia sinensis							+		
Biddulphia aurita									
Thalassiothrix Frauenfeldii							18	10	5
Thalassionema nitzschioides							27	35	20
Thalassiothrix longissima									2
Thalassiosira gravida									
Nitzschia seriata							25	10	8
Nitzschia longissima									
Coscinodiscus sp	1			2			+		
Coscinodiscus Janischii									
Stephanopyxis sp									+
Bacteriastrom varians							10		
Asterionella japonica									
Lauderia borealis								5	3
Cerataulina sp							10		
Ditylium Brightwellii							21		
Leptocylindrus danicus									
Eucampia zoodiacus									
Climacodium sp									
Paralia sulcata									
Dactyliosolen tenuis									
Trichodesmium sp									+
Actynoptychus sp		+							
Melosira sp									
Rhizosolenia calcar-avis									
Rh. setigera									

August				October						
04	05	06	09	01	02	03	04	05	06	07
24	24	24	24	22	22	22	22	22	22	23
0910	1135	1324	1505	1515	1620	1745	1935	2100	2255	030
—	1.5	1.0	1.0	1.5	4.0	1.0	1.0	6.0	3.0	15.0
50	50	50	50	50	50	50	50	50	50	100
50	—	50	50	50	50	50	50	50	50	50
22	19	24	18	38	41	40	35	42	23	40
13	56	51	36	2	20	29	6	68	6	130
5	8	5	10		10	5	5	+	5	35
		10								
5	32	37	22	2	10		1	3	1	30
						18				
						3				
3	5	3	3					15		15
	6	3				3		50		50
		1								
	5									
		+	1							

I. 207선 부유생물 조사성적

Plankton Data, Line 207(Vertical haul) 1961

Month	January					March				
Station	01	02	03	04	05	01	02	03	04	05
Date	1. 29	1. 29	1. 29	1. 29	1. 29	3. 9	3. 9	3. 9	3. 9	3. 9
Time	0750	0855	0957	1105	1155	1040	1200	1300	1450	1515
Volume(cc)	9. 0	9. 0	7. 0	1. 5	7. 0	2. 0	5. 0	3. 5	8. 0	4. 0
Rate of dilute	20	20	20	10	10	50	10	10	30	10
Collected depth	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	6	12	7	36	25	108	16	36	25	31
Phytoplankton Organisms	413	261	98	77	278	302	182	210	220	144
Zooplankton										
Copepoda sp			2	2	1	3		2		
Copepoda larva		4	2	3	7	23	4	10	4	12
Calanus sp		1		1	1	5		2		1
Cal. finmarchicus										
Cal. plumchrus										
Paracalanus sp	2	2	2	11	6	26		8	11	2
Eucalanus sp				1						
Pseudocalanus elongatus										
Pseudocalanus sp		1				16				
Rhincalanus sp										
Rhincal nastus										
Oithona sp	1	1	1	3		15				4
Oithona plumifera					2				2	2
Corycaeus venustus										
Corycaeus sp					5	7	1		1	1
Candacia sp										
Temora sp						1				
Parathemisto sp										
Hyperia sp										
Evadne sp										
Penilia sp										
Calycophora sp										
Noctiluca scintillans	2	1		11	1	2	2		1	3
Sagitta sp										
Peridinium sp										
Oikopleura sp		2		1	1	7	1			1
Ostracoda sp								3		
Ceratium sp						1	1	3	1	1
Doliolum sp										
Ophiopluteus sp	1			1						
Euphausia sp								1	3	
Tintinnopsis sp							1			
Lucifer raynaudii										
Planktomya sp										
Medusea sp										
Brachyura larva										
Polychaeta sp							2			
Salpa sp										
Alima larva										
Muggiaea sp				1			4	1	1	
Pelagic egg					1					
Copepoda egg		3						1	1	
Pseudolovenula sp										
Cosmarium sp								5		3
Shrimp larva										
Fish larva										
Fish egg				1		2				
Shell larva										1

		June						August				
08	09	03	04	05	07	08	09	01	02	03	04	05
3. 9	3. 9	6. 17	6. 17	6. 17	6. 17	7. 17	6. 17	8. 25	8. 25	8. 25	8. 25	8. 24
1830	1950	1615	1730	1900	2050	2240	2450	0430	0140	0319	0020	2330
30. 0	10. 0	1. 5	1. 0	1. 5	1. 0	1. 2	2. 0	3. 0	3. 5	1. 5	4. 5	4. 5
4	10	50	100	100	50	—	50	75	50	50	50	50
50	50	50	50	50	50	—	50	50	50	50	50	50
11	44	34	18	18	61	58	31	30	27	22	9	14
64	167	38	77	110	29	136	122	755	268	12	1084	537
		30	12	5	36	51	17	16	11	12	4	10
2	13	1			1	1	+		+	2	+	+
2	2				5		9					
								2				
1	2											
	3											
	1											
1					2							
				2				1	5	1	1	
						1						
1							2		3			
		+						+			1	
		1	+	3	+			4	+	+		
			+	1	2							
1	6											
				+	1		2	1	1	1	+	1
			1									
		1	3	5	4		1	2	5	4	2	3
	1			+	1	1	+					
		+	1	+	8			3	1		1	+
			+									+
									1	+		+
2		+				3	+			1		
												+
				1				1	+		+	
								+				+
		1										
						+				1		
1	3					+						
		+		1	+							
	3				1							
			+									
		+	1	+	+		+				+	
						1						

Month	August			September				
Station	07	08	09	01	02	03	04	05
Date	8. 24	8. 24	8. 24	10. 22	10. 23	10. 23	10. 23	10. 23
Time	2115	2000	1838	1048	0930	8300	0710	0750
Volume(cc)	3. 0	3. 0	2. 5	7. 0	8. 0	9. 0	5. 0	3. 0
Rate of dilute	50	50	50	50	50	50	50	50
Collected depth	75	50	50	50	50	50	50	50
Zooplankton Organisms	19	17	22	31	29	31	27	31
Phytoplankton Organisms	43	18	30	38	15	186	10	64
Zooplankton								
Copeoda sp	7	1	10	16	19	22	22	21
Copepoda larva	2			2				
Calanus sp				4	6		2	2
Cal. finmarchicus	3							
Cal. plumchrus			1					
Paracalanus sp								
Eucalanus sp						1		
Pseudocalanus elongatus								
Pseudocalanus sp								
Rhincalanus sp								
Rhincal. nustus								
Oithona sp								
Oithona plumifera			3		1			
Corycaeus venustus								
Corycaeus sp			1	2		1		1
Candacia sp					1			1
Temora sp								
Parathemisto sp		+						
Hyperia sp				+				
Evadne sp								
Penilia sp								
Calycophora sp	+							
Noctiluca scintillans								
Sagitta sp		1	2	2	+	+	+	2
Peridinium sp								
Oikopleura sp	3	1			+		+	1
Ostracoda sp		1				+		
Ceratium sp	3	4	3	3	1	2		1
Doliolum sp	1	+						
Ophiopluteus sp				+	1	1		1
Euphausia sp						4	1	1
Tintinnopsis sp								
Lucifer raynaudii	+		+					
Planktomya sp								
Medusea sp			1					
Brachyura larva								
Polychaeta sp								
Salpa sp								
Muggiaea sp								
Pelagic egg							1	
Copepoda egg		+				+		
Pseudolovenula sp				2				
Cosmarium sp								
Alima larva			1					
Shrimp larva								
Fish larva		+						
Fish egg								
Shell larva								

Month	January					March				
Station	01	02	03	04	05	01	02	03	04	05
Date	1. 29	1. 29	1. 29	1 29	1. 29	3. 9	3. 9	3. 9	3 9	3. 9
Time	0750	0855	0957	1105	1155	1040	1200	1300	1450	1515
Volume(cc)	9. 0	9. 0	7. 0	1. 5	7. 0	2. 0	5. 0	3. 5	8. 0	4. 0
Rate of dilute	20	20	20	10	10	50	10	10	30	10
Collected depth	50	50	50	50	50	50	50	50	50	50
Zooplankton Organisms	6	12	7	36	25	108	16	36	25	31
Phytoplankton Organisms	413	261	98	77	278	302	182	210	220	144
Phytoplankton										
Chaetoceros spp	148	56	7	12	63			5		
Ch. affinis										
Ch. Lorenzianus										
Ch. borealis										
Ch. didymus										
Ch. decipiens										
Ch. coarctatus										
Ch. densus										
Ch. setoensis										
Ch. Frichei										
Ch. peruvianus										
ch. socialis	18									
Ch. constrictus										
Ch. convoltus										
Rhizosolenia sp		3	1	4	28		23			
Rh. styliformis										
Rh. Stolterfothii										
Rh. hebetata										
Rh. Schrubsolei										
Rh. alata										
Rh. indica										
Skeletonema costatum	8		23	11	31		73	21	2	
Biddulphia sinensis	6	14	8	13	18	16	22	14		6
Biddulphia aurita										
Thalassiothrix Frauenfeldii										
Thalassionema nitzschioides										
Thalassiothrix longissima										
Thaiassiosira gravida										
Nitzschia seriata										
Nitzschia longissima										
Coscinodiscus sp	1	20	4	10	22	33	33	162	218	131
Cos. Janischii										
Stephanopyxis sp	8									
Bacteriastrum varians			18							
Asterionella japonica				10	41		6	6		
Lauderia borealis	46	53		4	26					3
Cerataulina sp	31	23	4	7	26					
Ditylium Brightwellii					2					
Leptocylindrus danicus										
Eucampia zoodiacus	108	68	33	6	21	253	21	2		4
Pleurosigma affine										
Climacodium sp										
Paralia sulcata	38									
Dactyliosolen tenuis										
Trichodesmium sp										
Melosira sp		24					4			
Rhizosolenia calcar-avis										
Rh. setigera										

		June						August				
08	09	03	04	05	07	08	09	01	02	03	04	05
3. 9	3. 9	6. 17	6. 17	6. 17	6. 17	7. 17	6. 17	8. 25	8. 25	8. 24	8. 25	8. 24
1830	1950	1615	1730	1900	2050	2240	2450	0430	0140	0319	0020	2330
30. 0	10. 0	1. 5	1. 0	1. 5	1. 0	1. 2	2. 0	3. 0	3. 5	1. 5	4. 5	4. 5
4	10	50	100	100	50	—	50	75	50	50	50	50
50	50	50	50	50	50	—	50	50	50	50	50	50
11	44	34	18	18	61	58	31	30	27	22	9	14
64	167	38	77	110	29	136	122	755	268	12	1084	537
								200	215	+	1. 020	508
						24		500		+		
						5						
						6						
						6						
				+								
		32	60	80	3		10		2		+	11
						21		3				
											+	
						4						
26	48						100					
8								2				
								20	2		+	3
				3				20	7	3	7	
		3	10	5	10	4					2	7
						11				+		
26	70	3	+	2								
					1	1	5					
			7	20	15	47	7		5	9	+	+
								10	15			
											15	
2									20		20	8
2	11								2		20	
	38					1						
						6						

Month	August			September				
Station	07	08	90	01	02	03	04	05
Date	8. 24	8. 24	8. 24	10. 22	10. 23	10. 23	10. 23	10. 23
Time	2115	2000	1838	1048	0930	8300	0710	075
Volume(cc)	3. 0	3. 0	2. 5	7. 0	8. 0	9. 0	5. 0	3. 0
Rate of dilute	50	50	50	50	50	50	50	50
Collected Depth	75	50	50	50	50	50	50	50
Zooplankton Organisms	19	17	22	31	29	31	27	31
Phytoplankton Organisms	43	18	30	33	15	186	10	64
Phytoplankton								
Chaetoceros spp	++		20					
Ch. affinis						23		20
Ch. Lorenzianus								
Ch. borealis					5	5		
Ch. didymus						5		5
Ch. decipiens								
Ch. coarctatus	8	5		10				5
Ch. densus								
Ch. setoensis								
Ch. Frichei								
Ch. peruvianus								
Ch. socialis								
Ch. constrictus								
Ch. convoltus								
Rhizosolenia sp	4	13	10			25		10
Rh. styliformis								
Rh. Stolterfothii					3	25		
Rh. hebetata						5		
Rh. Schrubsolei								
Rh. alata				2	2	15		7
Rh. indica								
Skeletonema costatum								
Biddulphia sinensis				1		15		2
Biddulphia aurita								
Thalassiothrix Frauenfeldii								
Thalassionema nitzschioides	8			10				
Thalassiothrix longissima	1			15	5	65		15
Thalassiosira gravida								
Nitzschia seriata	20							
Nitzschia longissima								
Coscinodiscus sp							10	
Cos. Janischii								
Stephanopyxis sp								
Bacterias rum varians						3		
Asterionella japonica								
Lauderia borealis								
Cerataulina sp								
Ditylium Brightwellii								
Leptocylindrus danicus								
Eucampia zoodiacus								
Pleurosigma affine								
Climacodium sp								
Paralia sulcata								
Dactyliosolen tenuis								
Trichodesmium sp	+							
Melosira sp	2							
Rhizosolenia calcar-avis								
Rh. setigera								

J. 206선 부유생물 조사성적

Plankton Data, Line 206 (Vertical hau①) 1961

Month	January					
Station	01	02	03	07	08	09
Date	3	3	3	3	3	3
Time	1910	1220	1315	1530	1655	1810
Volume(cc)	9.0	3.5	2.0	3.5	3.0	1.0
Rate of dilute	10	10	10	50	10	20
Collected depth	50	50	50	50	50	10
Zooplankton Organisms	9	152	111	124	34	13
Phytoplankton Organisms	119	110	98	284	83	55
Zooplankton						
Copepoda sp		3	8	8		
Copepoda larva		8	4	9	11	1
Calanus sp	5	7		3		
Cal. finmarchicus						
Paracalanus sp		101	75	62	13	
Eucalanus sp						
Pseudocalanus elongatus						8
Pse. sp					1	
Rhincalanus sp	2					
Rh in. nastus						
Oithona sp		11	5	7	3	
Othona plumifera						
Euchaeta sp						
Euchaeta marina						
Euchaeta japonica						
Corycaeus venustus						
Corycaeus sp	2	11	4	10	3	3
Centropages sp						
Centropages abdominalis			1			
Candacia sp						
Candacia pachydactyla						
Candacia bipinnata						
Metridia sp						
Metridia sp						
Acartia sp			1			
Temora sp						
Parafavella gigantia						
Parathemisto sp						
Hyperia sp						
Evadne sp						
Penilia sp						
Calycophora sp						
Noctiluca scintillans	1	1	7	1	3	1
Sagitta sp						
Peridinium sp						
Oikop'eura sp		2	2	6		
Ostracoda sp		2		2		
Ceratium sp			1	3		
Doliolum sp						
Ophiopluteus sp						
Euphausia sp		6				
Planktomya sp						
Acanthometron sp						
Medusea sp			2			
Brachyura larva						
Polychaeta sp				1		
Muggiaea sp				4		
Copepoda egg				8		

December						
01	02	03	04	06	07	09
9	9	9	9	9	9	9
0644	0955	0940	1048	1207	1325	1602
4.0	3.0	3.5	7.0	5.5	3.0	6.0
100	100	100	100	50	50	100
50	50	50	50	50	50	50
24	19	21	23	23	33	11
217	304	459	262	175	178	500
13	6	11	16	20	17	6
		1		+		
7	3	5			8	2
	2					
			1		3	
			2		1	
			2			+
					+	
+				1		+
1	3	2		+	1	2
1	5	2	2	+	3	
1						+
1				+		
				2		1
					+	

Month	January					
Station	01	02	03	07	08	09
Date	3	3	3	3	3	3
Time	1910	1220	1315	1530	1655	1810
Volume (cc)	9.0	3.5	2.0	3.5	3.0	1.0
Rate of dilute	10	10	10	50	10	20
Collected depth	50	50	50	50	50	10
Zooplankton Organisms	9	152	111	124	34	13
Phytoplankton Organisms	119	110	98	284	83	55
Phytoplankton						
Chaetoceros spp	9		1	21	2	
Ch. affinis						
Ch. borealis						
Ch. didymus						
Ch. decipiens						
Ch. coarctatus						
Ch. densus						
Ch. setoensis						
Ch. Frichei						
Ch. peruvianus						
Ch. socialis						
Ch. constrictus						
Ch. convoltus						
Rhizosolenia sp	3		7	53	8	
Rh. styliformis						
Rh. Stolterfothii						
Rh. hebetata						
Rh. Schrubsolei						
Rh. alata						
Rh. indica						
Skeletonema costatum	17		21	30	3	
Biddulphia sinensis	9	9	12	78	6	11
Biddulphia aurita						
Thalassiothrix Frauenfeldii						
Thalassionemanitzschioides						
Thalassiothrix longissima						
Thalassiosira gravida						
Nitzschia seriata						
Coscinodiscus sp	11	98	55	56	20	11
Cos. Janischii						
Stephanopyxis sp						
Bacteriastrum varians						
Asterionella japonica	6		2	2	6	
Lauderia borealis	13	3		44	24	4
Cerataulina sp					2	3
Ditylium Brightwellii						
Eucompia zoodiacus	51				8	26
Leptocylindrus danicus						
Pleurosigma affine						
Climacodium sp						
Paralia sulcata						
Dactyliosolen tenuis						
Trichodesmium sp						
Actynoptychus sp						
Melosira sp					4	6

December						
01	02	03	04	06	07	09
9	9	9	9	9	9	9
0644	0955	0940	1048	1207	1325	1602
4. 0	3. 0	3. 5	7. 0	5. 5	3. 0	6. 0
100	100	100	100	50	50	100
50	50	50	50	50	50	50
24	19	21	23	23	33	11
217	304	459	262	175	178	500
75	130	185	105	40	40	80
					15	15
60	30	125	40	50	40	150
10	30	50				
32	30	17	5	5	3	35
					15	
					10	
	25	30	5			75
+		5	40	25	15	25
			5	5		75
		5				
	35	25	25	30	5	25
	+	+				
	2		10	5	10	+
5	5	2	2	10	15	15
10		5	5	5		
5	10		5			
						5
20	5	5	15	+	10	
+						
	2					
				+		
		5				

K. 205선 부유생물 조사성적

Plankton Data, Line 205 (Vertical haul) 1961

Month	December				
Station	01	02	03	04	05
Date	7	7	7	7	7
Time(cc)	0745	0900	1015	1209	1414
Volume(cc)	0. 5	4. 5	0. 5	1. 0	0. 1
Rate of dilute	50	50	50	50	50
Collected depth	50	50	50	50	50
Zooplankton Organisms	16	17	29	17	22
Phytoplankton Organisms	472	17	143	8	33
Zooplankton					
Copepoda sp	7	11	13	10	16
Copepoda larva					
Calanus sp					
Cal. finmarchicus					
Cal. cristatus		2	2		
Paracalanus sp					
Eucalanus sp					
Oithona sp			6		
Oithona plumifera			1		
Pseudocalanus elongtus					
Pseu. sp					
Euchaeta sp					
Euchaeta japonica					
Corycaeus sp	1			1	1
Cory. anglicus		1			
Centropages sp					
Cent. abdominalis					
Candacia sp		1			
Candacia bipinnata					
Candacia pachydactyla					
Metridia sp					
Acartia sp					
Temora sp					
parafavella gigantia					
Parathemisto sp					
Hyperia sp					
Penilia sp					
Evadne SP					
Podon Schmackeri					
Calycophora sp					
Noctiluca scintillans					
Sagitta sp			+		+
Peridinium sp					
Oikopleura sp	3	2	3	2	2
Ostracoda sp					
Ceratium sp	5		3	2	3
Doliolum sp					
Echinopluteus sp					
Euphausia sp				1	
Euphausia larva					
Tintinnopsis sp					
Planktomya sp			1	+	
Polychaeta larva	+				
Medusea sp					
Brachyura larva				1	
Mysidea larva					
Ophiopluteus larva			+		
Shell larva					

Month	December				
Station	01	02	03	04	05
Date	7	7	7	7	7
Time	0745	0900	1015	1209	1414
Volume(cc)	0. 5	4. 5	0. 5	1. 0	0. 1
Rate of dilute	50	50	50	50	50
Collected depth	50	50	50	50	50
Zooplankton Organisms	16	17	29	17	22
Phytoplankton Organism	472	17	143	8	38
Phytoplankton					
Chaetoceros spp			25		
Ch. affinis					
Ch. Lorenzianus	15		15		
Ch. borealis			25		10
Ch. didymus					
Ch. decipiens					
Ch. coarctatus	5				
Ch. densus					
Ch. setoensis					
Ch. Frichei					
Ch. pervianus					
Ch. constrictus					
Ch. convoltus					
Ch. furca					
Rhizosolenia sp			15		
Rh. styliformis				2	
Rh. Stolterfothii					
Rh. hebetata					
Rh. Schrubsolei					
Rh. alata			25		10
Rh. robusta		2		+	1
Rh. setigera					
Rh. calcar-avis					
Skoletonema costatum	200				
Biddulphia sinensis	200	9	7		1
Biddulphia aurita					
Thalassiothrix Frauenfeldii	25				
Thalassionemanitzschioides	5	5			
Thalassiothrix longissima			15		
Nitzschia seriata					
Nit. longissima					
Coscinodiscus sp	10	1	+	6	1
Diatoma sp	5		1		
Stephanopyxis palmeriana			15		15
Ditylium Brightwellii	2				
Asterionella japonica	5				

L. 204선 부유생물 조사성적

Plankton Data, Line 204 (Vertical haul) 1961

Month	December				
Station	01	02	03	04	11
Date	16	16	16	15	12
Time	1210	1044	0924	1305	2120
Volume (cc)	3.2	1.8	1.0	7.0	5.5
Rate of dilute	150	150	50	100	100
Collected depth	30	128	38	50	50
Zooplankton Organisms	5	18	8	7	25
Phytoplankton Organisms	295	61	43	6	435
Zooplankton					
Copepoda sp	5	12	3	4	10
Copepoda larva					
Calanus sp					
Cal. finmarchicus					
Cal. cristatus					
Paracalanus sp					
Eucalanus sp					
Oithona sp		1		1	
Oithona plumifera					
Pseudocalans elngatus					
Pseu. sp					
Euchaeta sp					
Euchaeta japonica					
Corycaeus sp	+	+	+		
Cory. anglicus					
Centropages sp					
Cent. abdominalis					
Candacia sp					
Candacia bipinnata					
Candacia pachydactyla					
Metridia sp					
Acartia sp					
Temora sp					
Parafavella gigantia					
Parathemisto sp			1		
Hyperia sp					
Penilia sp					
Evadne sp					
Podon Schmackeri					
Calycophora sp	+				
Noctiluca scintillans	+	1	+		10
Sagitta sp	+	3	+	1	5
Peridinium sp					
Oikopleura sp	+	+	+	+	+
Ostracoda sp			1		
Ceratium sp		1	3	+	+
Doliolum sp					
Echinopluteus sp					
Euphausia sp					
Euphausia larva					
Tintinnopsis sp					
Planktomya sp					
Polychaeta larva					
Medusea sp				1	
Brachyura larva					
Mysidea larva					+
Ophiopluteus lavra					
Shell larva					+

Month	December				
Station	01	02	03	04	11
Date	16	16	16	15	12
Time	1210	1044	0924	1305	2120
Volume (cc)	3. 2	1. 8	1. 0	7. 0	5. 5
Rate of dilute	150	50	50	100	100
Collected depth	30	128	38	50	50
Zooplankton Organisms	5	18	8	7	25
Phytoplankton Organisms	295	61	43	6	435
Phytoplankton					
Chaetoceros sp	+				
Ch. affinis				2	
Ch. Lorenzianus	45	3			
Ch. borealis			2		
Ch. didymus					
Ch. decipiens			3		
Ch. coarctatus					
Ch. densus					
Ch. setoensis					
Ch. Frichei					
Ch pervianus					
Ch. constrictus					
Ch. convoltus	40				
Ch. furca					60
Rhizosolenia sp					
Rh. styliformis	5		5	1	285
Rh. Stolterfothii					
Rh. hebetata					
Rh. Schrubsolei					
Rh. alata	+			1	5
Rh. robusta					
Rh. setigera					
Skeletonema costotum					
Biddulphia sinensis	50	8	21		35
Biddulphia aurita					
Thalassithrix Frauenfeldii	110	42	9		+
Thalassiothrix nitzschioides					
Thalassionema longisssima					10
Nitzschia seriata					30
Nit. longissima					
Coscinodiscus sp	45	8	1	2	5
Diatomia sp					5
Stephanopyxis palmeriana	+				
Ditylium Brightwellii					
Asterionella japonica					

M. 203선 부유생물 조사성적

Plankton Data, Line 203 (Vertical haul) 1961

Month	May					
Station	01	02	03	04	10	11
Date	8	8	8	8	8	8
Time	1400	1545	1725	1900	2040	2220
Volume (cc)	1.0	10	3.0	8	10	10
Rate of dilute	2	—	—	—	2	3
Collected depth	—	50	50	50	50	50
Zooplankton Organisms	27	46	26	21	9	60
Phytoplankton Organisms	2	4	7	8	3	—
Zooplankton						
Copepoda sp		2	3	2		4
Copepoda larva		1	1		1	
Calanus sp	4					
Cal. finmarchicus						
Cal. plumchrus						
Paracalanus sp	5	25	6	3	5	39
Eucalanus sp		1	1			
Pseudocalanus elongatus					1	
Pseu. sp						
Rhincalanus sp						
Oithona sp	5	1		1		6
Oithona plumifera			1			
Euchaeta sp	2					
Euchaeta marina		2			2	
Euchaeta japonica						
Corycaeus venustus						
Cory. sp	2					1
Centropages sp						
Cent. abdominalis						
Candacia sp				4		
Can. pachydactyla						
Can. bipinnata						
Metridia sp						
Met. lucens			6			
Acartia sp		1				
Temora sp						
Parafavella gigantia						
Parathemisto sp						
Hyperia sp		1				
Penilia sp						
Evadne sp						
Calycophora sp						
Noctiluca scintillans		3	2	4		
Pyrocystis noctiluca						
Acanthometron sp						
Sagitta sp	2		1			

May					December	
12	13	14	15	17	05	06
8	9	9	9	9	12	12
8000	0940	1120	1415	1720	1425	1905
4	3	2. 1	0. 3	9. 0	5. 2	14. 0
10	2	10	2	5	100	150
50	50	50	30	40	50	50
123	117	86	22	25	21	6
—	2	—	3	—	55	966
2				2	15	2
	1	1		1		
7	43	3	1	10		
87	48	64	17	9		
5	5	2			1	
6	11	6	1	1		
2	1	3	3		1	1
				2		
1	6	7				+
						+
5	2					1
2					1 +	+

Month	May					
Station	01	02	03	04	10	11
Date	8	8	8	8	8	8
Time	1400	1545	1725	1900	2040	2220
Volume (cc)	1.0	10	3.0	8	10	10
Rate of dilute	2				2	3
Collected depth		50	50	50	50	50
Zooplankton Organisms	27	46	26	21	9	60
Phytoplankton Organisms	2	4	7	8	3	
Zooplankton						
Oikopleura sp		2	3			7
Ostracoda sp	6					2
Ceratium sp		3		2		
Doliolum sp		1	1	4		
Salpa sp			1			
Euphaussia sp		2				
Euphausia larva						
Shell larva ~~sp~~		1				
Brachyura larva	1		1			
Phytoplankton						
Chaetoceros affinis						
Ch. coarctatus						
Ch. convoltus						
Ch. spp						
Rhizosolenia sp	1	4	7	8	3	
Rh. styliformis						
Rh. Stolterfothii						
Rh. hebetata						
Rh. Schrubsolei						
Rh. alata						
Rh. indica						
Rh. setigera						
Skeletonema costatum						
Biddulphia sinensis						
Biddulphia aurita						
Thalassiothrix Frauenfeldii						
Thalassionema nitzschioides						
Thalassiothrix longissima						
Coscinodiscus sp	1					
Cos. Janischii						
Stephanopyxis palmeriana						
Pleurosigma affine						
Climacodium sp						
Lauderia borealis						
Cerataulina sp						

yav					December	
12	13	14	15	17	05	06
8	9	9	9	9	12	12
8000	0940	1120	1415	1720	1425	1905
4	3	2. 1	0. 3	9. 0	5. 2	14. 0
10	2	10	2	5	100	150
50	50	50	30	40	50	50
123	117	86	22	25	21	6
—	2	—	3	—	55	966
5					2	2
						+
					1	+
1						+
						10
						6
					30	870
					14	8
					2	2
					1	10
					+	
					2	
						5
					1	3
	2		3		1	2
						+
						50
					4	

N, 310선 부유생물 조사성적

Plankton Data, Line 310 (Vertical haul) 1961

Month	May					
Station	01	02	03	04	05	06
Date	1	1	1	1	1	1
Time	0600	0725	0823	1005	1110	1235
Volume (cc)	1.0	1.5	1.5	2.5	5.0	0.5
Rate of diute	50	50	50	50	—	—
Collected dilute	20	30	50	50	50	50
Zooplankton Organisms	28	19	27	32	—	22
Phytoplankton Organisms	27	59	30	34	—	51
Zooplankton						
Copepoda sp	20	6	17	12	+	7
Copepoda larva				1		3
Calanus sp	7	12	6	15		6
Cal. finmarchicus						
Cal. plumchrus						
Paracalanus sp						
Eucalanus sp						
Pseudocalanus elongatus						
Pseudocalanus sp						
Rhincalanus sp						
Oithona sp						
Oithona plumifera						
Euchaeta sp						
Euchaeta marina						
Euchaeta japonica						
Corycaeus venustus						
Cory. sp						
Centropages sp	1					
Cent. abdominalis						
Condacia sp			3	3		
Can. pachydactyla						
Can. bipinnata						
Metridia sp						
Met. lucens						
Acartia sp						
Temora sp						
Parafavella gigantia						
Parathemisto sp	+	+	1		+	
Hyperia sp		+			+	
Penilia sp			+			
Evadne sp						
Calycophora sp						
Noctiluca scintillans						
Pyrocystis noctiluca						
Pyroc. fusiformis						
Sagitta sp	+	1	+	+		1
Oikopleura sp						
Ostracoda						
Ceratium sp						1
Euphausia sp						
Euphausia larva						
Lucifer raynaudii						
Planktomya sp		+				
Acanthometron sp						
Pelagic egg	+					
Copepoda egg				1		4
Shell larva						
Mysidea larva						

June				December		
01	02	03	10	01	02	03
5	5	5	5	10	10	9
2107	2002	1852	1702	0135	7.0	2240
2.0	2.0	3.0	4.0	1.0	200	3.0
50	50	50	50	—	—	—
18	44	50	50	23	—	50
29	43	60	46	17	—	17
11	—	1	—	89	665	24
19	27	27	25	9	++	12
	2	2	+		+	
4	8	15	12			
3						
						+
		3	1	1		1
	2					
		3	4			
+	+	3	1			
				2		
1	1	+		4	+	1
2	1		1		+	+
		1				
			1			
						1
						1
+	+	5	1			
	2	1				
				1		
						1

Month	May					
Station	01	02	03	04	05	06
Date	1	1	1	1	1	1
Time	0600	0725	0823	1005	1110	1235
Volume (cc)	1.0	1.5	1.5	2.5	5.0	0.5
Rate of dilute	50	50	50	50	—	—
Collected depth	20	30	50	50	50	50
Zooplankton Organisms	28	19	27	32	—	22
Phytoplankton Organisms	27	59	30	34	—	51
Phytoplakton						
Chaetoceros spp		17	25			
Ch. affinis						
Ch. borealis	3	27		26		13
Ch. didymus						
Ch. decipiens						
Ch. coarctatus						
Ch. densus						
Ch. setoensis						
Ch. Frichei						
Ch. peruvianus						
Ch. socialis						
Ch. constrictus						
Ch. convoltus						
Rhizosolenia sp						
Rhizoselnia styliformis	+	5	4	2		7
Rh. stolterfothii						
Rh. hebetata						
Rh. Schrubsolei						
Rh. alata						
Rh. indica						
Skeletonema costatum						
Biddulphia sinensis			1	6		10
Biddulphia aurita						
Thalassiothrix Frauenfeldii						
Thalassionema nitzschioides	8	4				15
Thalassiothrix longissima	+					
Coscinodiscus sp						
Coscinodiscus Janischii						
Stephanopyxis palmeriana						
Bacteriastrum varians						
Asterionella japonica						
Hemialus Hauckii						
Lauderia borealis						
Cerataulina sp						
Ditylium Brightwellii	1	6				
Pleurosigma affine						
Climacodium sp						
Paralia sulcata	15					
Dactynoptychus sp						
Actynoptychus sp		+		+		5
Melosira sp						
Guinardia sp						
Corethron criophilum						1
Rhizosolenia calcar-avis						
Rh. setigera						
Chaetoceros furca						
Nitzschia seriata						

June				December		
01	02	03	10	01	02	03
5	5	5	5	10	10	9
2107	2002	1852	1702	0135	7.0	2240
2.0	2.0	3.0	4.0	1.0	200	3.0
50	50	50	50			
18	44	50	50	23		50
29	43	60	46	17		17
11		1		89	665	24
				23		
7					+	
					140	
2				60	15	9
				1	510	
+		1		4	+	3
				+		12
2			+			
				+		
		+		+	+	1
				1		
					+	

O. 309선 부유생물 조사성적

Plankton Data, Line 309 (Vertical haul) 1961

Month	May								
Station	01	02	03	04	05	06	11	12	13
Date	2	2	2	2	2	2	2	2	2
Time	0600	0715	835	104	1125	1233	1426	1615	1922
Volume(cc)	2.0	2.0	0.1	2.4	0.1	3.0	4.0	5.0	4.0
Rate of dilute	10	2	2	2	2	2	2	10	2
Collected depth	30	30	30	50	50	50	50	40	25
Zooplankton Organisms	17	15	10	10	7	2	2	3	13
Phytoplankton Organisms	19	—	56	29	7	1	1	1	17
Zooplankton									
Copepopa sp		1						1	4
Copepoda larva				1					
Calanus sp	3	13	6	2	1				2
Cal. finmarchicus									
Paracalanus sp	3	1	3	7	2	1			1
Eucalanus sp									
Pseudocalanus elongatus									
Pseudocalanus sp									
Rhincalanus sp									
Rhincalanus nasutus									
Oithona sp									
Oithona plumifera									3
Enchaeta sp									
Euchaeta marina									
Euchaeta japonica									
Corycaeus venustus									
Corycaeus sp									
Centropages sp					4	1	1		
Centropages abdominalis	11								
Candacia sp									
Candacia pachydactyla									
Candacia bipinnata									
Metridia sp									
Metridia lucens									
Acartia sp									
Temora sp									
Parafavella gigantia									
Parathemisto sp									
Hyperia sp									
Penilia sp									
Evadne sp									
Calycophora sp									
Noctiluca scintillans									
Pyrocystis noctiluca									
Pyrocystis fusiformis									
Sagitta sp									
Oikopleura sp									
Ostracoda sp									
Ceratium sp									
Doliolum sp									
Echinopluteus sp									
Euphausia sp							2		
Euphausia larva									
Tininnopsis sp			1						
Lucifer raynaudii									
Planktomya sp									
Acanthometron sp							1		1
Medusea sp									

June					December				
01	02	03	11	12	01	02	03	05	06
3	3	3	3	2	9	9	9	9	9
1227	1117	1002	0957	2323	0845	0955	1115	1435	1605
1.7	1.0	1.0	2.0	0.5	4.0	1.0	2.0	1.5	2.0
10	2	2	2	2	—	—	—	—	—
30	33	50	35	50	25	23	—	—	—
33	18	33	31	36	6	7	9	9	7
—	—	3	2	—	16	27	10	2	17
1		2			2	4	3	6	3
			2	1					
10	12	1	11	8					
16	5	12	10	8					
		1							
		3	1						
				1				1	
1		1		1					
									2
4	1		4						
				16					
			1						
					+			+	
					+	+	1		+
					1	2			
					2	+	4	2	2
1		10			+	+	1		
		1							

Month	May								
Station	01	02	03	04	05	06	11	12	13
Date	2	2	2	2	2	2	2	2	2
Time	0600	0715	835	104	1125	1233	1426	1615	1922
Volume(cc)	2.0	2.0	0.1	2.4	0.1	3.0	4.0	5.0	4.0
Rate of dilute	10	2	2	2	2	2	2	10	2
Collected depth	30	30	30	50	50	50	50	40	25
Zooplankton Organisms	17	15	10	10	7	2	2	3	13
Phytoplankton Organisms	19	—	56	29	7	1	1	1	17
Zooplankton									
Brachyura larva									
Paralia sp									
Lingula larva									
Polychaeta larva									
Salpa sp									
Cosmarium sp									
Alima larv									
Muggiaea sp									
Pelagic egg									
Copepoda egg				1					2
Shrimp larva									
Shell larva									
Fish egg									
Sticholomche zonclea									
Mysidea larva									
Ophiopluteus larva									
Phytoplankton									
Chaetoceros spp			18	16					2
Ch. affinis				+					
Ch. borealis			+						
Ch. didymus		+					+		
Ch. decipiens									
Ch. coarctatus									
Ch. densus									
Ch. setoensis									
Ch. Frichei									
Ch. peruvianus									
Ch. socialis									
Ch. constrictus									
Ch. convolutus									
Rhizosolenia sp	8			11					2
Rhizosolenia styliformis									
Rhizosolenia Stolterfothii									
Rhizosolenia hebetata									
Rhizosolenia Schrubsolei									
Rhizosolenia alata									
Rhizosolenia indica									
Skeletonema costatum									
Biddulphia sinensis	11		30	2	7	1	1		9
Biddulphia aurita									
Thalassiothrix Frauenfeldii									
Th. nitzschioides									
Thalassiothrix longissima									
Coscinodiscus sp			8						4
Cosinodiscus Janischii									
Nitzschia seriata									
Nitzschia paradoxa									
Ditylium Brightwellii								1	

June					December				
01	02	03	11	12	01	02	03	05	06
3	3	3	3	2	9	9	9	9	9
1227	1117	1002	0957	2323	0845	0955	1115	1435	1605
1.7	1.0	1.0	2.0	0.5	4.0	1.0	2.0	1.5	2.0
10	2	2	2	2	—	—	—	—	—
30	33	50	35	50	25	28	—	—	—
33	18	33	31	36	6	7	9	9	7
—	—	3	2	—	16	27	10	2	17
						+			
		2	2	1					
						1	+		
					1				
					+		+		
							+		
						6	3		
	+	+	+						
		+		+			+		+
			+					+	
					3				
						+			
						12	6	1	2
								+	
			2		2	1		1	10
					10				15
		3			1	1	1	+	
					+				
						7			

P. 307선 부유생물 조사성적

Plankton Data, Line 309 (Vertical haul) 1961

Month	May			
Station	01	02	03	04
Date	4	4	4	4
Time	1704	1502	1405	—
Volume(cc)	2.0	1.0	1.2	1.0
Rate of dilute	10	10	10	—
Collected depth	50	10	20	—
Zooplankton Organisms	29	5	34	2
Phytoplankton Organisms	6	1	6	5
ZooPlankton				
Copepoda sp	4	1	1	
Copepoda larva	1	1	4	1
Calanus sp	3	2	2	5
Cal. finmarchicus				
Paracalanus sp	10	3	8	2
Eucalanus sp	1		2	
Pseudocalanus elongatus		1		1
Pse. sp				
Rhincalanus sp	1			1
Rhi. nastus				
Oithona sp	3	2	4	1
Oithona plumifera				
Euchaeta sp		1	2	
Euchaeta marina		1		3
Euchaeta japonica	1			1
Corycaeus venustus	3	2		1
Corycaeus sp	1		1	
Centropages sp	3		2	
Centropages abdominalis		2		1
Candacia sp		4		1
Candacia pachydactyla				
Cadacia bipinnata				
Metridia sp				
Metridia lucens				
Acartia sp			5	
Temora sp		2		1
Parafavella gigantia			1	
Parathemisto sp		2		1
Sagitta sp				
Evadne sp				
Sagitta sp			1	
Carycophora sp				
Noctiluca scintillans	15		17	
Phytoplankton				
Biddulphia sinensis	6		3	2
Biddulphia aurita	1	1		1
Thalassiothrix Frauenfeldii		5	4	
Thalassionema nitzschioides	3	1	2	1
Thalassiothrix longissima		2		1
Chaetoceros spp	10	5	3	2
Coscinodiscus sp		1	6	3

제 3 편

특 별 해 양 관 측 성 적

PART 3

MISCELLANEOUS OCEANOGRAPHIC OBSERVATIONS

1961

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동 해 해 양 조 사 성 적

OCEANOGRAPHIC SURVEY

EAST COAST

1 9 6 1

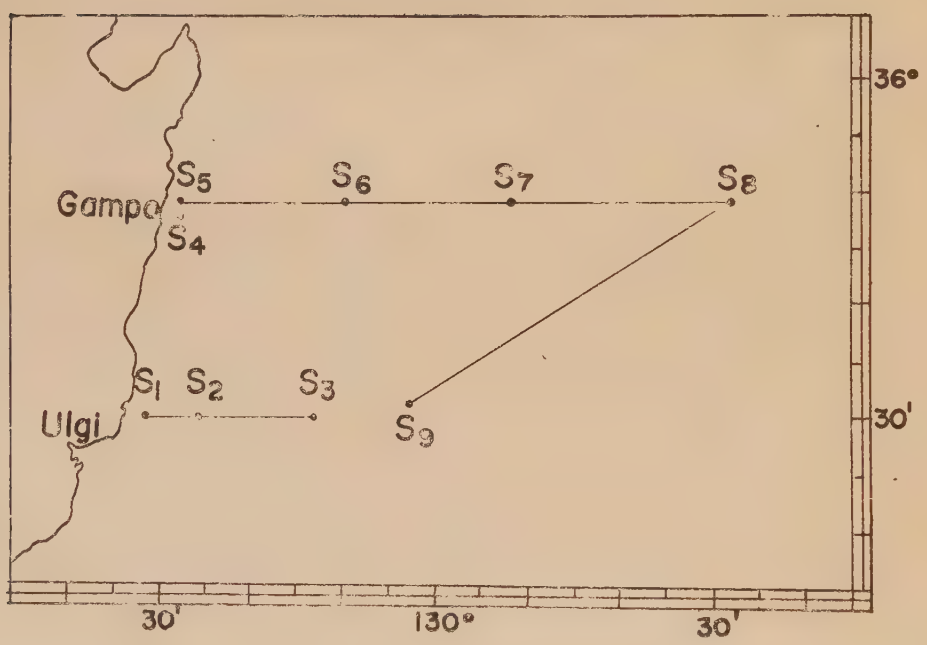
A. 감포 근해 해양관측성적, 1~3월 (제1도)

East Coast, January-March (Fig.1)

Date		① January 1961			② March 1961					
Station Number		S_1 35°30′ 129°29′	S_2 35°30′ 129°35′	S_3 35°30′ 129°47′	S_4 35°43′ 129°33′	S_5 35°49′ 129°32′	S_6 35°49′ 129°51′	S_7 35°49′ 130°09′	S_8 35°49′ 130°27′	S_9 35°31′ 129°58′
Day		31	31	31	11	11	11	11	11	11
Item	Time / Z(m)	0755	0900	1030	0600	0700	0850	1110	1330	1825
T °C	0	13.80	13.60	13.20	11.50	12.50	12.20	12.40	12.60	13.20
	10	12.80	13.35	12.39	11.30	11.86	11.90	12.71	11.90	13.38
	25	12.44	13.44	12.39	11.50	—	12.60	13.48	12.63	13.30
	50	12.14	13.44	12.40	—	11.52	11.90	12.61	11.85	12.84
	100	—	13.32	11.89	—	4.16	4.90	11.61	9.82	12.29
	150	—	9.37	—	—	11.30	3.15	7.06	8.49	9.17
	200	—	—	—	—	—	1.30	1.88	3.90	—
	300	—	—	—	—	—	—	0.72	0.92	—
	400	—	—	—	—	—	—	0.52	0.50	0.60
	500	—	—	—	—	—	—	0.33	0.37	0.46
	600	—	—	—	—	—	—	0.33	0.32	0.36
	Botm.	11.98	9.20	—	10.27	3.02	—	—	—	—
S ‰	0	34.69	34.67	34.54	34.63	34.65	34.63	34.63	34.64	34.70
	10	34.54	34.67	34.69	34.54	34.63	34.69	34.63	34.63	34.67
	25	34.56	34.61	34.47	34.63	34.52	34.81	34.81	34.72	34.85
	50	34.51	34.67	34.60	—	34.61	34.63	34.72	34.72	34.67
	100	—	34.67	34.51	—	—	—	—	—	—
	150	—	34.27	34.42	—	34.29	34.63	34.72	34.47	34.70
	200	—	—	—	—	—	34.11	34.38	34.43	34.51
	300	—	—	—	—	—	34.11	34.11	34.04	34.15
	400	—	—	—	—	—	—	34.04	34.11	34.15
	500	—	—	—	—	—	—	34.11	34.11	34.07
	600	—	—	—	—	—	—	34.13	34.07	34.11
	Botm.	34.54	34.24	34.18	34.52	34.20	—	—	—	—
Scunding (m)		64	121	141	54	125	790	1850	—	180
Transp. (m)		11	16.20	16.5	8	15	14	16	19	야간
Color		3	3	3	5	5	3	3	2	3
Wave		3	3	5	1	3	2	2	2	2
Swell		2	2	2	3	1	1	1	1	1
Air Temp. (°C)		—	—	—	—	—	—	—	—	—
Air Press. (mm)		763.5	763.5	763.4	770	771	772.5	771	770.5	771
Wind		N. 3	N. 4	NW. 5	W. 1	NW. 3	NW. 2	NW. 2	WNW. 2	S. 2
Cloud		0	0	Ns. 1	Ci. 1	0	0	Ci. 1	Cs. 9	Cs. 8
Weather		B	B	B. C	B	B	B	B	C	C

제 1 도　감포 근해 해양관측점 위치도(1~3월)

Fig. 1. Station Locations, East Coast (Jan.~Mar.)



남 해 해 양 조 사 성 적

OCEANOGRAPHIC SURVEY

SOUTH COAST

1 9 6 1

A. 진해만 해 양관측성적, 2~10월 (제2도)

Chinhae-Man, February~October (Fig. 2)

Date		① February 1961									
Station Number		C_1 35°02′ 129°01′	C_2 35°01′ 128°59′	C_3 35°01′ 128°55′	C_4 34°57′ 128°50′	C_5 34°54′ 128°46′	C_6 34°59′ 128°45′	C_7 35°02′ 128°45′	C_8 35°03′ 128°43′	C_9 35°03′ 128°39′	C_{10} 35°01′ 128°35′
Day		2	2	2	2	2	2	2	2	2	2
Item	Time / Z(m)	0830	0900	1150	1010	1055	1220	1240	1315	1352	1425
T °C	0	12.50	11.30	10.89	11.60	11.50	10.20	6.00	6.00	6.00	6.00
	10	11.68	11.32	10.26	10.36	11.34	7.69	6.48	6.48	5.73	5.44
	25	—	—	—	—	—	—	—	6.96	—	—
	50	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	11.75	11.18	10.65	10.50	10.09	8.19	7.18	7.17	5.86	—
S ‰	0	34.60	34.42	34.60	34.54	34.60	34.33	34.20	34.02	33.68	33.62
	10	34.60	34.51	34.47	34.47	34.47	34.18	34.11	33.89	33.68	—
	25	—	—	—	—	—	—	—	33.95	—	—
	50	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	34.60	34.51	33.44	34.45	34.47	34.20	—	33.86	33.57	33.50
Sounding (m)		26	31	26	34	28	16	15	33	21	19
Transp. (m)		1.3	2	2	2	1.5	2	2	2.5	2.5	2.5
Color		6	6	6	6	5	5	10	10	10	7
Wave		2	2	3	3	3	2	2	1	2	3
Swell		1	2	2	2	2	1	1	1	1	1
Air Temp. (°C)		—	—	—	—	—	—	—	—	—	—
Air Press. (mm)		763	763.5	763.5	763.5	763.5	763	763	762.5	762.5	763
Wind		N. 2	NW. 4	NW. 6	NW. 6	NW. 6	NW. 6	NW. 5	W. 5	N. 5	N. 5
Cloud		Cu. 3	Cu. 4	Cu. 4	Cu. 3	Cu. 2	Cu. 1	Cu. 1	Cu. 1	Cu. 1	Cu. 1
Weather		BC	BC	BC	BC	B	B	B	B	B	B

Date		February 1961								
Station Number		C_{13} 35°03′ 128°03′	C_{14} 35°00′ 128°31′	C_{15} 34°58′ 128°33′	C_{16} 34°56′ 128°34′	C_{17} 34°56′ 128°30′	C_{18} 34°50′ 128°27′	C_{19} 34°50′ 128°27′	C_{20} 34°41′ 128°23′	C_{30} 34°34′ 128°43′
Day		2	2	2	2	2	2	3	3	3
Item	Time / Z(m)	1500	1525	1544	1600	1627	1710	0739	0910	1030
T °C	0	6.10	6.50	6.30	6.30	6.30	6.10	8.00	11.00	11.83
	10	—	—	—	—	—	—	8.70	10.37	11.91
	25	—	—	—	—	—	—	—	11.56	11.89
	50	—	—	—	—	—	—	—	11.53	—
	100	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—
	Botm.	4.95	4.83	4.85	4.58	4.55	6.40	9.12	11.37	11.55
S ‰	0	33.37	33.28	33.24	—	32.50	34.04	34.42	34.60	34.67
	10	—	—	—	—	—	—	34.42	34.60	34.60
	25	—	—	—	—	—	—	—	34.63	34.68
	50	—	—	—	—	—	—	—	34.51	34.65
	100	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—
	Botm.	33.19	33.22	33.28	33.10	—	34.20	34.42	34.54	—
Sounding (m)		19	22	21	19	14	11	28	70	71
Transp. (m)		4	4	4	5	4.5	—	4	4	5
Color		7	5	5	5	5	—	5	5	4
Wave		3	2	2	2	2	2	1	3	3
Swell		1	1	1	1	1	1	1	2	2
Air Temp. (°C)		—	—	—	—	—	—	—	—	—
Air Press. (mm)		763	763	—	763	763	763	766.5	767	771
Wind		N. 5	N. 4	N. 3	N. 4	N. 4	W. 5	N. 4	N. 4	N. 5
Cloud		Cu. 1	Cu. 1	Cu. 1	Cu. 1	Cu. 1	St. 1	Cu. 1	Cu. 1	0
Weather		B	B	B	B	B	B	B	B	B

② March 1961

C_3 35°00′ 128°55′	C_4 34°57′ 128°50′	C_6 34°59′ 128°45′	C_7 35°02′ 128°46′	C_8 35°04′ 128°39′	C_{13} 35°03′ 128°39′	C_{15} 34°58′ 128°33′	C_{16} 34°56′ 128°34′	C_{18} 34°50′ 128°27′	C_{19} 34°46′ 128°27′
15	15	15	15	15	15	15	15	15	15
1445	1400	1310	1115	1030	0930	0855	0800	0740	0610
12.10	10.70	10.60	10.60	14.50	13.60	13.50	13.30	11.50	11.80
10.77	10.70	—	9.36	8.73	7.46	7.53	7.70	11.30	11.23
—	10.81	—	9.28	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	10.35	9.20	9.00	—	—	—	—	—	—
31.83	32.72	32.79	32.95	33.17	32.83	32.95	32.99	33.80	34.38
33.04	32.79	—	33.13	33.19	32.95	33.08	33.06	34.25	34.38
—	33.26	—	33.22	—	—	—	—	—	34.36
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
33.26	33.40	33.19	33.22	33.17	33.19	33.31	33.19	—	34.34
22	35	14	35	29	17	23	20	12	50
4	7	4	5	3	7	5	7	5	10
10	5	9	6	6	4	5	5	5	5
3	3	3	1	2	0	0	1	1	1
1	2	1	0	0	—	0	0	0	0
11.0	10.3	11.0	13.3	10.5	8.8	10.1	—	11.3	12.0
768.5	769.3	769.3	770.3	770.2	770.5	771	770.5	769	769
E. 3	E. 3	E. 3	E. 1	E. 2	0	0	NW. 1	S. 1	NW. 1
Cs. 10	Cs. 10	Cs. 10	Cs. 7	Cs. 9	Cs. 9	Sc 9	Sc. 8	Cs. 2	—
C	C	C	BC	C	C	C	C	B	BC

Date		③ October 1961							
Station Number		C'_1 34°56′ 128°28′	C'_2 34°57′ 128°27′	C'_3 34°59′ 128°29′	C'_4 35°04′ 128°21′	C'_5 35°05′ 128°32′	C'_6 35°03′ 128°29′	C_1 35°02′ 129°01′	C_2 35°01′ 128°59′
Day		11	11	11	12	12	12	13	13
Item	Time / Z(m)	1630	1650	1720	0935	1035	1155	1825	1750
T °C	0	22.7	22.8	22.7	22.0	21.7	22.7	22.7	22.2
	10	22.2	22.3	22.2	22.0	—	22.2	22.6	22.5
	25	—	—	—	—	—	—	—	22.4
	50	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	22.2	22.2	22.1	21.9	21.9	22.2	22.6	22.7
S ‰	0	29.56	29.42	29.42	29.49	29.79	29.67	31.92	27.38
	10	29.56	29.51	29.78	30.21	—	—	32.59	31.62
	25	—	—	—	—	—	—	—	31.96
	50	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	29.58	29.69	29.96	30.39	30.23	29.96	32.88	31.98
Sounding (m)		18	20	24	19	14	13	27	33
Transp. (m)		5	5	5	4	4	2	—	2
Color		—	—	—	—	—	—	—	—
Wave		0	0	0	0	0	0	0	0
Swell		1	1	1	1	1	1	1	1
Air Temp. (°C)		21.6	21.0	20.5	18.6	22.6	26.2	20.7	20.7
Air Press. (mm)		—	—	—	—	—	—	—	—
Wind		NE. 1	NE. 1	NE. 1	NW. 1	0	W. 1	S. 1	S. 1
Cloud		0	0	Ci. 1	0	0	0	0	0
Weather		B	B	B	B	B	B	B	B

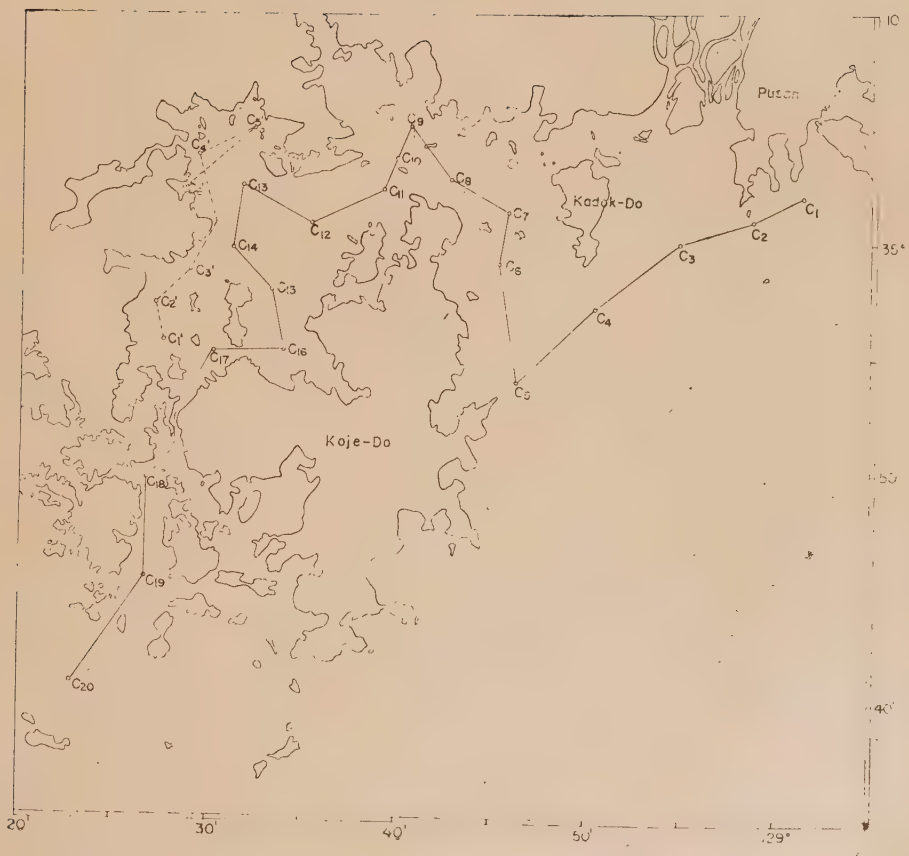
October 1961

C_3 35°00′ 128°55′	C_4 34°57′ 128°50′	C_5 34°54′ 128°46′	C_6 34°59′ 128°49′	C_7 35°02′ 128°45′	C_8 35°03′ 128°43′	C_9 35°03′ 128°39′	C_{10} 35°01′ 128°35′
13	13	13	13	13	13	13	13
1710	1628	1539	1510	1442	1415	1330	1300
22.1	21.1	22.2	22.3	22.7	22.4	22.4	22.5
22.9	21.9	22.2	22.1	22.2	—	22.3	22.2
—	21.1	—	22.0	22.1	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
22.8	21.8	22.1	21.8	22.9	22.2	21.9	22.1
28.01	27.47	30.66	30.32	30.46	30.48	29.92	29.85
32.18	30.46	30.77	30.59	30.50	—	30.23	29.87
—	32.52	—	31.11	30.68	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
32.48	32.79	30.84	30.84	30.84	30.46	30.46	30.30
25	40	18	30	34	10	24	21
2	2	2	3	3	3	4	4
—	—	—	—	—	—	—	—
0	0	0	0	0	0	1	0
1	1	1	0	1	1	1	1
21.2	23.7	23.0	22.7	22.6	23.0	21.3	21.6
—	—	—	—	—	—	—	—
0	0	0	S. 1	S. 1	S. 1	NW. 1	E. 1
0	0	0	Ci. 1	Ci. 1	Cc. 1	0	0
B	B	B	B	B	B	B	B

Date		October 1961							
Station Number		C_{11} 35°02′ 128°39′	C_{12} 35°01′ 128°35′	C_{13} 35°03′ 128°32′	C_{14} 35°00′ 128°31′	C_{15} 34°58′ 128°33′	C_{16} 34°56′ 128°31′	C_{17} 34°56′ 128°30′	C_{18} 34°50′ 128°27′
Day		11	11	11	11	11	11	12	12
Item	Time / Z(m)	0905	0830	0800	0710	1545	1430	1130	1015
T °C	0	22.0	22.1	22.2	21.9	22.5	22.4	22.8	22.5
	10	21.8	22.1	22.1	22.0	22.3	—	22.5	23.1
	25	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	21.7	21.8	21.9	22.0	22.1	22.2	22.6	23.1
S ‰	0	29.69	29.78	29.87	29.69	29.96	31.29	31.46	31.55
	10	29.87	29.87	29.90	29.76	29.96	—	31.53	31.82
	25	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—
	Botm.	30.05	30.81	30.39	30.66	30.25	31.27	31.73	32.00
Scunding (m)		20	27	27	24	15	9	15.5	16
Transp. (m)		—	6	6	6	5	3	2	3
Color		4	—	—	—	—	—	—	—
Wave		0	0	0	0	0	0	0	0
Swell		1	1	1	1	1	1	1	1
Air Temp. (°C)		19.2	17.5	19.6	19.0	20.7	21.5	19.0	18.6
Air Press. (mm)		—	—	—	—	—	—	—	—
Wind		NW. 1	NW. 1	NW. 1	SE. 1	NE. 1	E. 1	N. 1	NW. 1
Cloud		0	0	0	—	—	—	—	—
Weather		B	B	B	B	B	B	B	B

제 2 도 진해만 해양관측점 위치도(2~10월)

Fig. 2. Station Locations, Chinhae-Man (Feb.~Oct.)



B. 남해안 해양관측성적, 5월(제3도)

South Coast, May (Fig. 3)

Date		① May 1961					
Station Number		S_1 34°04′ 125°55′	S_2 33°24′ 126°08′	S_3 33°10′ 126°01′	S_4 33°55′ 125°55′	S_5 33°46′ 126°04′	S_6 33°36′ 126°08′
Day		6	6	6	6	6	6
Item	Time / Z(m)	0730	1520	1830	0922	1052	1240
T °C	0	12.80	15.10	15.20	13.60	13.30	14.30
	10	12.60	14.40	14.35	13.21	12.46	13.43
	25	12.37	14.61	15.02	12.82	12.90	13.80
	50	11.80	14.45	14.20	12.30	12.73	12.84
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	11.73	14.51	14.05	12.30	12.40	12.58
S ‰	0	34.11	34.07	34.07	34.20	33.86	33.86
	10	34.20	34.07	34.07	34.20	33.86	33.86
	25	34.16	34.29	34.07	34.11	34.07	34.15
	50	34.07	34.22	34.13	34.29	34.11	34.04
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	34.18	34.22	34.16	34.25	34.33	34.29
Sounding (m)		78	70	105	82	102	130
Transp. (m)		6	6	9	7	8	9
Color		6	5	6	6	6	5
Wave		1	2	1	3	1	0
Swell		1	1	1	1	1	1
Air Temp. (°C)		13.0	15.8	16.0	14.5	13.9	14.7
Air Press. (mm)		762	762	761	764	764	763
Wind		S. 1	S. 4	ESE. 4	ESE. 2	ENE. 2	NNE. 3
Cloud		Ci. 1	Ci. 3	Ci. 2	Ci. 2	Ci. 3	Ci. 2
Weather		B	BC	B	B	BC	B

May 1961

S_7 33°54′ 127°15′	S_8 33°45′ 127°09′	S_9 33°36′ 127°03′	S_{10} 33°21′ 126°58′	S_{11} 33°11′ 126°58′	S_{12} 33°00′ 126°22′	S_{13} 33°00′ 126°39′
8	8	8	7	7	6	6
1115	0930	0745	2000	1815	2055	2315
14.80	15.90	14.40	16.70	17.40	14.60	16.00
14.11	15.80	14.24	16.53	16.52	16.30	15.38
13.55	14.65	17.70	15.74	16.40	17.02	15.81
13.62	14.64	14.81	15.23	16.23	15.81	15.82
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
13.15	14.70	14.70	14.63	15.41	16.40	15.75
33.82	34.29	33.80	34.58	34.60	34.11	34.05
33.80	34.33	33.80	34.54	34.60	34.04	33.84
34.04	34.25	34.25	34.51	34.47	34.51	34.31
34.16	34.38	34.38	—	34.51	34.33	34.45
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
34.25	34.60	34.47	34.36	34.60	34.27	
82	100	120	104	105	106	104
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
14.0	17.8	15.3	17.4	18.2	16.7	17.0
761	761	760	760	759	763	762
NNW. 3	NW. 3	S. 4	SSW. 6	SSW. 5	SE. 4	SE. 1
—	—	—	—	—	—	—
—	—	—	—	—	—	—

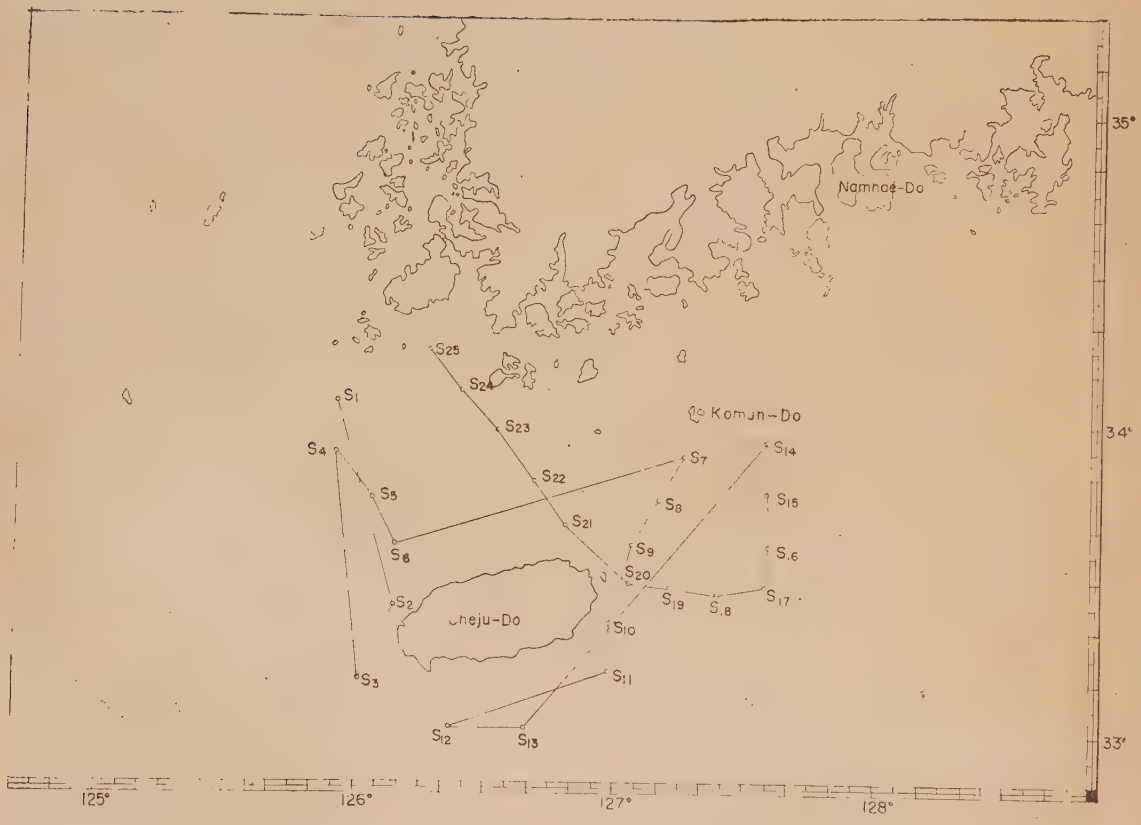
Date		May 1961				
Station Number		S_{14} 33°56′ 127°35′	S_{15} 33°47′ 127°35′	S_{16} 33°36′ 127°35′	S_{17} 33°28′ 127°35′	S_{18} 33°27′ 127°23′
Day		8	8	8	8	8
Item	Time / Z(m)	1340	1545	1610	1700	2040
T °C	0	15.20	15.90	18.40	15.50	17.50
	10	14.15	16.21	18.02	18.61	18.21
	25	13.23	16.05	17.91	18.35	17.62
	50	12.74	15.35	17.17	16.35	17.50
	100	—	—	—	—	—
	150	—	—	—	—	—
	200	—	—	—	—	—
	300	—	—	—	—	—
	Botm.	12.70	14.55	15.05	14.85	15.12
S ‰	0	34.16	34.13	34.69	34.69	34.69
	10	34.36	35.26	34.69	34.74	34.65
	25	34.22	34.42	34.78	34.69	34.69
	50	34.24	34.45	34.69	34.65	34.69
	100	—	—	—	—	—
	150	—	—	—	—	—
	200	—	—	—	—	—
	300	—	—	—	—	—
	Botm.	34.25	34.51	34.61	34.61	34.61
Sounding (m)		74	92	96	100	94
Transp. (m)		6	7	11	9	—
Color		4	4	1	1	—
Wave		2	1	1	1	—
Swell		1	1	1	1	—
Air Temp. (°C)		14.0	14.3	15.7	16.5	16.6
Air Press. (mm)		761	760	760	760	761
Wind		SW. 2	SW. 2	SW. 3	SW. 5	SW/W. 4
Cloud		Ci. 4	Ns. 6	Ci. 9	Ns. 10	—
Weather		BC	BC	C	C	—

May 1961

S_{19} 33°23′ 127°11′	S_{20} 33°29′ 127°02′	S_{21} 33°41′ 126°47′	S_{22} 33°48′ 126°40′	S_{23} 33°58′ 126°31′	S_{24} 34°06′ 126°24′	S_{25} 34°14′ 126°16′
8	9	9	9	9	9	9
2250	0025	0940	1130	1415	1607	1720
—	15.20	14.80	14.80	13.80	14.30	14.00
—	14.65	14.40	13.20	13.42	13.70	13.20
—	14.85	13.85	12.85	13.05	12.72	12.74
—	14.41	14.75	12.85	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
	14.80	13.31	12.85	13.02	13.10	12.73
34.29	33.95	33.91	33.98	34.25	34.22	33.95
34.29	33.82	33.87	34.02	34.22	33.98	33.95
34.49	33.98	33.87	34.09	34.20	33.98	33.89
34.49	34.19	34.07	34.16	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
34.58	34.61	34.16	34.16	34.20	33.96	33.98
100	125	120	86	56	32	40
—	—	8	7	5	2	2
—	—	4	4	5	5	5
—	—	1	0	0	1	1
—	—	1	1	1	1	1
16.0	16.2	18.5	16.3	17.0	17.6	16.8
761	760	760	760	756	757	756
SW. 4	SW. 3	E. 4	SSE. 2	NE. 2	SE. 3	SE. 3
—	—	Ci. 2	Ns. 2	Ns. 2	Ns. 6	St. 4
—	—	B	B	B	BC	BC

제3도 남해안 해양관측점 위치도(5월)

Fig. 3. Station Locations, South Coast (May)



C. 남해안 해양관측성적, 6월(제4도)

South Coast, June (Fig. 4)

Date		① June 1961						
Station Number		S_{26} 34°04′ 125°55′	S_{27} 33°55′ 125°59′	S_{28} 33°45′ 126°04′	S_{29} 33°35′ 126°04′	S_{30} 34°07′ 125°10′	S_{31} 34°09′ 125°21′	S_{32} 34°11′ 125°34′
Day		8	8	8	8	7	7	7
Item	Time / Z(m)	1015	1140	1310	1440	1240	1414	1600
T °C	0	18.30	18.50	18.10	18.20	18.00	18.30	16.50
	10	17.52	17.95	17.72	17.82	17.35	18.02	16.25
	25	12.69	15.88	14.55	16.64	15.08	15.01	14.38
	50	12.52	12.47	12.44	14.41	12.62	13.02	13.31
	100	—	—	—	14.13	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	12.38	12.38	12.21	14.09	11.28	11.95	13.18
S ‰	0	32.81	32.74	32.72	32.74	33.06	33.15	33.57
	10	32.72	32.72	32.72	32.72	33.06	33.19	33.80
	25	33.86	33.04	32.95	33.31	33.48	33.78	33.86
	50	33.87	33.84	33.86	34.13	33.78	33.95	33.95
	100	—	—	—	34.15	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	33.93	33.93	34.61	34.22	34.13	33.98	33.95
Sounding (m)		77	85	92	112	103	86	75
Transp. (m)		14	15	14	18	15	15	8
Color		4	4	4	3	4	5	5
Wave		4	4	4	3	3	3	3
Swell		2	2	2	2	2	2	2
Air Temp. (°C)		19.9	19.5	19.3	19.0	18.2	18.3	17.4
Air Press. (mm)		756	756	756	756	760	759	758
Wind		S. 2	S. 2	S. 3	S. 3	S. 3	S. 3	S. 3
Cloud		Cc. 8	Cu. 8	Cu. 9	Cc. 9	Cc. 9	St. 9	Cc. 10
Weather		C	C	C	C	C	C	C

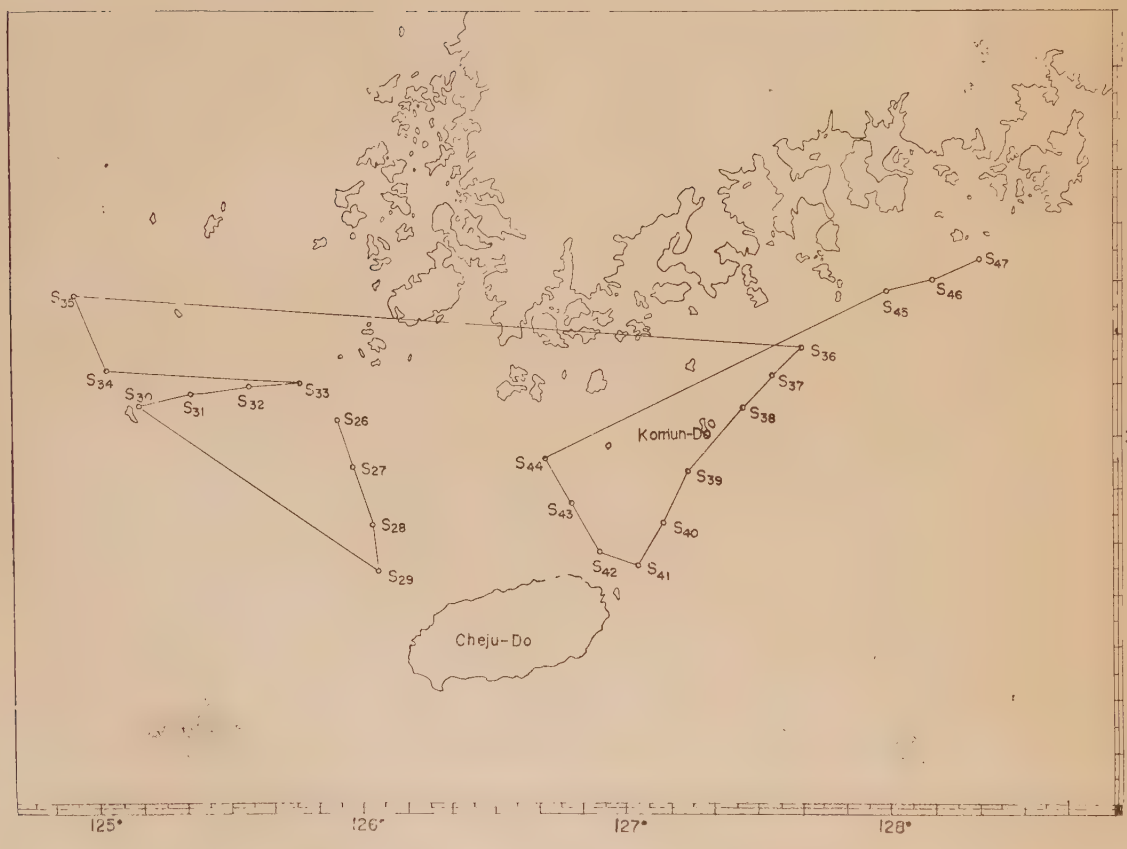
Date		June 1961						
Station Number		S_{33} 34°12′ 125°46′	S_{34} 34°14′ 125°01′	S_{35} 34°28′ 124°54′	S_{36} 34°19′ 127°41′	S_{37} 34°13′ 127°35′	S_{38} 34°07′ 127°28′	S_{39} 33°54′ 127°15′
Day		7	7	7	12	12	12	10
Item	Time / Z(m)	1715	1020	0920	0910	0805	0700	1415
T °C	0	16.70	18.40	18.40	18.70	17.60	16.50	16.80
	10	15.05	18.02	18.28	18.55	16.75	16.12	16.55
	25	14.08	15.71	14.78	15.02	14.23	13.65	15.55
	50	13.89	11.73	11.32	—	—	—	15.33
	100	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	13.75	11.45	11.15	14.68	13.91	13.32	14.73
S ‰	0	33.82	33.24	33 75	33.84	33.89	33.93	33.42
	10	33.86	33.21	33.75	33.84	33.93	33.93	33.55
	25	33.89	34.77	33.80	33.93	33.93	33.93	34.18
	50	33.95	34.04	34.13	—	—	—	34.38
	100	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	33.95	34.09	34.13	33.93	33.93	33.86	34.54
Sounding (m)		60	103	102	39	37	47	86
Transp. (m)		5	18	18	5	3	3.5	13.5
Color		6	3	3	5	5	6	4
Wave		3	3	3	2	3	2	4
Swell		2	2	2	1	1	1	2
Air Temp. (°C)		17.8	19.5	20.2	20.5	19.5	17.5	18.5
Air Press. (mm)		758	760	760	755	755.3	755	760
Wind		S. 3	S. 3	S. 3	SW. 2	SW. 2	SW. 2	S. 2
Cloud		Ci. 9	Cs. 8	St. 6	Cu. 6	St. 4	St. 5	St. 7
Weather		C	C	BC	BC	BC	BC	BC

June 1961

S_{40} 33°45′ 127°09′	S_{41} 33°36′ 127°03′	S_{42} 33°38′ 126°53′	S_{43} 33°43′ 126°48′	S_{44} 33°56′ 126°42′	S_{45} 34°27′ 128°00′	S_{46} 34°31′ 128°11′	S_{47} 34°34′ 128°22′
10	10	10	10	10	12	12	12
1255	1135	1025	0900	0747	1120	1235	1410
17.40	17.70	17.80	17.00	15.90	18.90	20.00	18.60
16.20	17.25	17.45	16.85	15.82	17.63	18.89	17.32
15.41	15.82	15.75	16.65	14.83	14.48	16.09	16.12
15.37	15.55	15.35	15.13	13.35	—	—	—
—	13.85	14.23	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
14.63	13.58	13.84	14.68	13.20	14.17	14.42	14.62
33.50	33.31	33.31	33.39	33.39	33.84	33.48	33.93
33.59	34.18	33.31	33.46	33.42	33.84	33.66	33.93
34.18	34.09	33.22	33.84	33.57	33.98	34.02	34.02
34.27	35.01	34.18	34.38	33.95	—	—	—
—	35.05	34.56	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
34.49	34.61	34.63	34.54	33.95	34.16	34.27	34.25
98	127	130	97	69	42	45	41
15	16	16	16	12	4	7	6
4	3	4	3	5	5	5	5
4	3	3	3	3	3	3	4
2	2	2	2	2	2	2	2
18.4	18.2	18.0	17.6	17.5	20.3	20.6	20.6
760	760	760	760	760	755	755	754.5
S. 2	S. 2	S. 2	S. 2	S. 2	SW. 3	SW. 3	SW. 3
Cu. 8	Sc. 9	Cu. 8	Cc. 9	Cu. 9	Cc. 6	Ci. 3	St. 4
C	C	C	C	C	BC	BC	BC

제4도 남해안 해양관측점 위치도 (6월)

Fig. 4. Station Locations, South Coast (June)



서 해 해 양 조 사 성 적

OCEANOGRAPHIC SURVEY

WEST COAST

1 9 6 1

A. 서해안 해양관측성적, 4~6월 (제5도)

West Coast, April~June (Fig. 5)

Date		① April 1961									
Station Number		S_1 35°44′ 26°21′	S_2 35°40′ 126°17′	S_3 35°30′ 126°10′	S_4 35°27′ 126°06′	S_5 35°24′ 126°03′	S_6 35°27′ 126°21′	S_7 35°31′ 126°18′	S_8 35°38′ 126°12′	S_9 35°37′ 126°06′	S_{10} 35°35′ 126°01′
Day		16	16	17	17	18	18	18	19	19	19
Item	Time / Z(m)	1000	0910	0700	0800	—	1730	—	0735	0855	1000
T °C	0	8.7	9.4	8.7	9.0	9.5	11.4	9.9	9.5	9.8	11.1
	10	—	—	8.9	9.0	9.5	—	—	9.4	9.6	8.8
	25	—	—	—	—	—	—	—	9.1	—	8.4
	50	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	8.5	8.5	8.7	9.0	9.4	—	—	—	9.0	8.3
S ‰	0	31.85	—	32.41	32.11	32.21	31.85	32.12	31.91	—	32.12
	10	—	—	—	31.94	31.94	—	—	31.82	32.14	—
	25	—	—	—	—	—	—	—	32.09	—	—
	50	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	31.82	—	31.94	32.00	32.43	—	—	32.09	—	32.27
Sounding (m)		15	17	17	18	20	—	—	30	30	—
Transp. (m)		0.5	0.6	—	0.5	0.4	—	—	—	27	—
Color		—	—	—	—	—	—	—	—	—	—
Wave		0	—	—	1	1	—	—	0	0	0
Swell		2	2	1	2	2	1	1	0	0	0
Air Temp. (°C)		—	9	9.2	9.4	9.7	—	9.4	9.8	—	12.3
Air Press. (mm)		—	—	772	772	772	—	—	—	773	773
Wind		SW. 2	SW. 1	SW. 2	SW. 2	SW. 2	0	0	0	0	0
Cloud		0	0	0	0	0	0	0	0	0	0
Weather		B	B	B	B	B	B	B	B	B	B

Date		April 1961									
Station Number		S_{11} 35°33′ 125°55′	S_{12} 35°30′ 125°50′	S_{13} 35°27′ 125°45′	S_{14} 35°24′ 125°40′	S_{15} 35°38′ 126°13′	S_{16} 35°32′ 126°01′	S_{17} 35°28′ 125°57′	S_{18} 35°31′ 126°09′	S_{19} 35°32′ 126°18′	S_{20} 35°36′ 126°22′
Day		19	19	19	23	28	28	28	28	28	28
Item	Time / Z(m)	1110	1200	1300	1200	0700	1300	1430	1610	1710	1900
T °C	0	12.5	11.5	13.5	11.2	10.7	12.9	12.9	11.5	11.4	11.1
	10		8.2	9.5	9.7	10.7	9.0	8.9	9.7	—	—
	25	8.1	8.1	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	8.1	8.0	8.4	9.5	10.2	8.5	8.5	9.6	10.3	11.1
S ‰	0	32.59	—	—	—	31.82	32.16	32.03	32.21	—	31.85
	10	—	—	32.03	—	31.82	32.27	32.25	32.05	—	31.78
	25	32.36	—	—	—	—	—	—	—	—	—
	50	—	—	—	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—	—	—	—
	Botm.	32.47	32.39	32.32	—	31.94	32.39	32.29	32.12	31.94	31.85
Sounding (m)		46	—	—	20	26	30	30	23	16	11
Transp. (m)		3	3	—	2.6	2	5	6	2	2	0
Color		—	—	—	—	—	—	—	—	—	—
Wave		0	0	0	0	0	0	1	1	0	0
Swell		0	0	0	0	1	1	1	1	1	0
Air Temp. (°C)		14.5	14.5	15.2	13.5	12.0	14.4	14.5	15	13.2	13.0
Air Press. (mm)		773	773	773	769	771	—	—	—	—	—
Wind		0	SW. 1	SW. 1	W. 1	NE. 1	SW. 2	SW. 2	SW. 1	SW. 2	0
Cloud		0	0	0	0	Cu. 2	Ci. 6	Ci. 3	Ci. 3	Ci. 3	Ci. 3
Weather		B	B	B	B	B	BC	BC	BC	BC	B

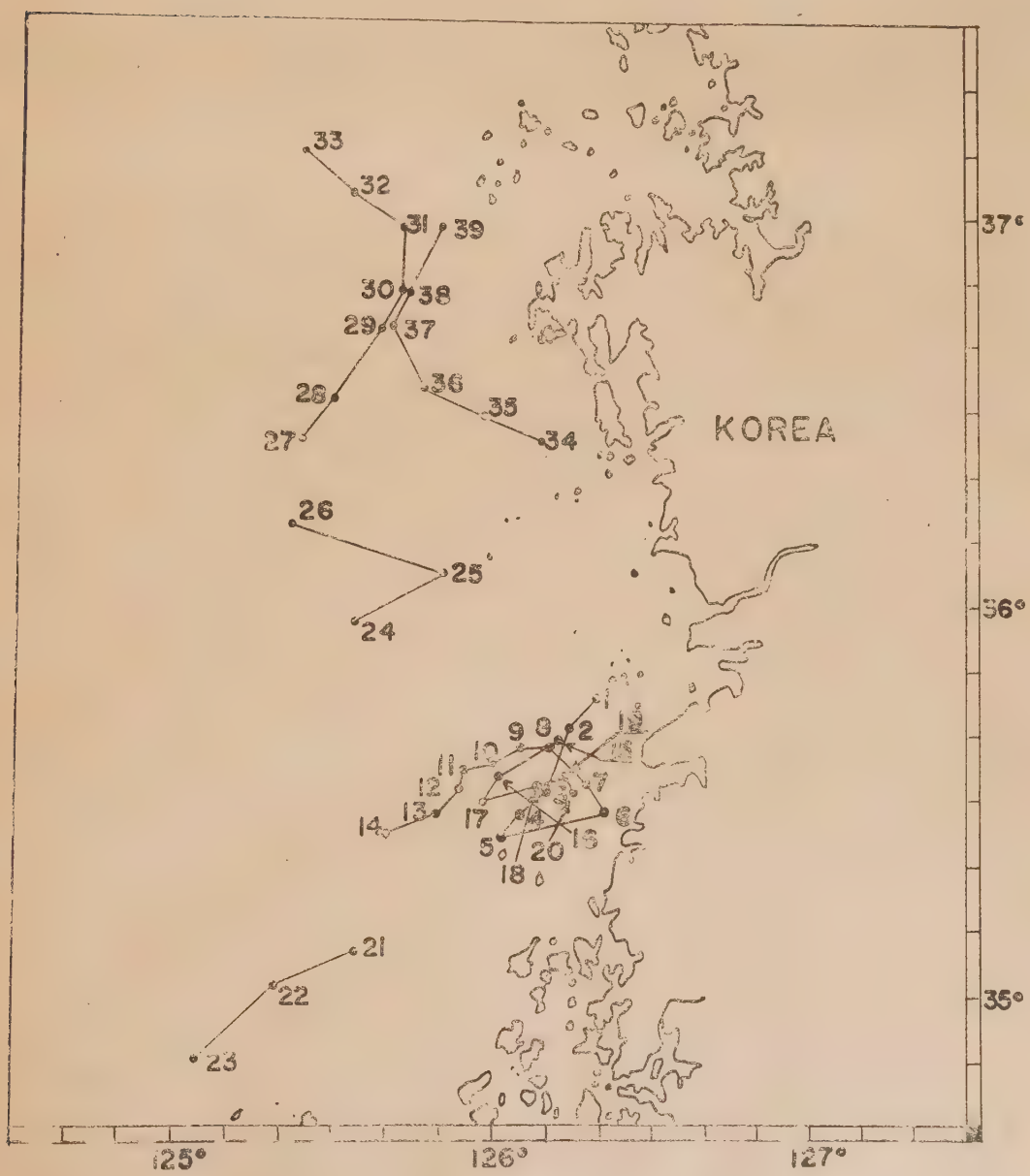
② April 30~May 4, 1961

S_{21} 34°51′ 125°04′	S_{22} 34°59′ 125°19′	S_{23} 35°07′ 125°35′	S_{24} 35°58′ 125°34′	S_{25} 36°05′ 125°51′	S_{26} 36°13′ 125°12′	S_{27} 36°26′ 125°23′	S_{28} 36°32′ 125°29′	S_{29} 36°43′ 125°33′	S_{30} 36°49′ 125°43′	S_{31} 35°59′ 125°42′	S_{32} 37°05′ 125°33′	S_{33} 37°11′ 125°23′
30	30	30	2	2	2	3	3	3	3	4	4	2
1230	1445	1700	1420	1610	1920	1655	1755	1945	2040	0720	0840	1000
12.10	12.40	12.40	12.30	12.00	11.10	11.80	10.50	9.20	10.00	9.90	9.30	9.20
11.18	11.62	10.49	9.59	9.08	10.52	10.15	10.35	9.32	9.12	9.85	9.12	8.99
8.28	9.05	7.51	8.35	8.15	8.15	7.05	7.66	7.68	8.05	—	—	6.68
8.05	7.91	7.92	7.98	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
8.71	7.89	7.45	7.68	7.85	10.05	6.72	6.51	7.38	7.11	8.42	8.09	8.45
32.94	32.66	32.66	32.50	32.50	32.13	32.54	32.32	32.36	32.32	32.14	—	32.05
32.94	32.74	32.66	32.50	32.50	32.27	32.41	32.32	32.32	32.23	32.14	—	32.05
32.94	32.85	32.76	32.66	32.54	—	32.41	32.32	32.32	32.23	—	—	32.05
33.04	32.85	32.76	32.66	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
33.37	33.01	32.70	32.65	32.54	32.25	32.50	32.34	32.32	32.23	32.14	—	—
95	75	75	57	48	28	59	45	35	41	28	38	41
5	12	7	7	8	—	8	4	5	—	5	6	8
6	5	5	5	5	—	5	5	—	—	9	8	6
3	4	4	3	2	3	2	3	2	3	3	3	3
2	2	2	2	2	2	1	2	1	2	1	2	2
13.8	13.0	11.5	15.3	12.5	12.0	12.5	11.2	10.1	10.0	11.5	11.6	11.8
764	764	764	762	761	760	755	754	752	752	748	748	748.5
W. 1	W. 2	W. 3	W. 1	W. 2	W. 1	NW 2	NW. 3	NW. 1	NW. 3	NE. 3	NE. 3	NE. 3
St. 8	Cs. 7	Sc. 8	St. 7	St. 6	Cc. 8	Ci. 9	Sc. 9	Sc. 9	Sc. 10	Sc. 10	Sc. 10	St. 10
C	BC	C	BC	BC	C	C	R	C	R	R	R	R

Date		③ June 1961					
Station Number		$S_{3.4}$ 36°25′ 126°09′	$S_{3.5}$ 36°29′ 125°57′	$S_{3.6}$ 36°33′ 125°46′	$S_{3.7}$ 36°43′ 125°39′	$S_{3.8}$ 36°49′ 125°43′	$S_{3.9}$ 36°59′ 125°49′
Day		2	2	2	2	2	2
Item	Time / Z(m)	1740	1625	1500	1335	1225	1051
T °C	0	13. 28	12. 20	13. 50	12. 40	12. 10	12. 10
	10	12. 05	12. 18	12. 35	11. 85	11. 79	12. 28
	25	—	11. 52	11. 22	—	—	—
	50	—	—	—	—	—	—
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	12. 15	11. 30	10. 82	11. 38	11. 48	11. 85
S ‰	0	32. 18	32. 18	32. 23	32. 23	32. 18	31. 96
	10	32. 16	32. 14	32. 27	32. 18	32. 16	32 11
	25	—	32. 27	32. 27	—	—	—
	50	—	—	—	—	—	—
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	32. 18	32. 18	32. 23	32. 23	32. 07	32. 02
Sounding (m)		22	34	45	29	25	21
Transp. (m)		2	6	9	3	3	1
Color		6	6	6	8	10	12
Wave		3	3	3	3	2	2
Swell		2	2	2	1	1	1
Air Temp. (°C)		12. 8	12. 2	13. 1	13. 0	12. 2	11. 8
Air Press. (mm)		763	763	763. 5	764	764	764
Wind		NW. 3	NW. 3	NW. 3	E. 2	E. 2	E. 2
Cloud		Cs. 5	St. 5	St. 6	Sc. 7	Cc. 6	Cu. 5
Weather		BC	BC	BC	BC	BC	BC

제5도 서해안 해양관측점 위치도 (4~6월)

Fig. 5. Station Locations, West Coast (April~June)



B. 연평도 근해 해양관측성적, 5월(제6도)

West Coast, May (Fig. 6)

Date		① May 1961					
Station Number		S_1 37°35′ 125°43′	S_2 37°30′ 125°42′	S_3 37°25′ 125°43′	S_4 37°20′ 125°43′	S_5 37°40′ 125°36′	S_6 37°38′ 125°36′
Day		15	10	14	14	13	11
Item	Time / Z(m)	0845	1550	1408	1335	1035	1730
T °C	0	13.40	12.60	13.70	12.10	13.30	11.90
	10	—	—	—	11.18	—	—
	25	—	—	—	—	—	—
	50	—	—	—	—	—	—
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	13.98	11.85	11.70	10.45	13.68	12.62
S ‰	0	30.79	31.06	31.24	31.58	30.63	30.99
	10	—	—	—	31.67	—	—
	25	—	—	—	—	—	—
	50	—	—	—	—	—	—
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	30.70	31.44	31.65	31.64	30.57	30.88
Sounding (m)		16	12	10	27	23	20
Transp. (m)		5	3	5	8	1	5
Color		11	11	11	10	11	11
Wave		2	3	3	3	4	3
Swell		1	2	2	2	3	2
Air Temp. (°C)		15.5	15.5	16.5	15.3	14.7	15.0
Air Press. (mm)		76.3	762	765	765	750	752
Wind		W. 1	SW. 1	NE. 2	NE. 2	S. 2	N. 1
Cloud		Cf. 8	Cf. 9	St. 2	Cs. 2	St. 7	St. 8
Weather		C	R	B	B	BC	C

May 1961

S_7 37°35′ 125°36′	S_8 37°32′ 125°36′	S_9 37°32′ 125°36′	S_{10} 37°30′ 125°36′	S_{11} 37°25′ 125°36′	S_{12} 37°20′ 125°36′
10	19	15	10	14	14
1950	1506	0920	1555	1445	1245
12.40	15.18	13.10	12.20	14.00	12.10
—	—	—	—	—	10.62
—	—	—	—	—	9.75
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
12.88	14.38	13.45	11.73	11.82	9.49
30.91	30.88	30.97	30.88	31.00	31.67
—	30.88	—	—	—	31.71
—	—	—	—	—	31.71
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
30.86	30.88	31.02	32.05	31.00	31.74
12	17	15	13	11	53
—	2	4	1	4	1.5
—	10	11	10	11	11
3	2	2	3	3	3
2	1	1	2	2	2
14.5	16.8	16.1	14.8	16.5	14.0
752	761	763	752	765	765
SW. 8	SW. 1	W. 1	SW. 1	NE. 2	NE. 2
Cs. 8	Ci. 3	St. 7	Cc. 9	St. 4	St. 2
C	BC	BC	C	BC	B

Date		May 1961					
Station Number		S_{13} 37°40′ 125°30′	S_{14} 37°38′ 125°30′	S_{15} 37°35′ 125°30′	S_{16}' 37°33′ 125°30′	S_{16} 37°33′ 125°30′	S_{17} 37°30′ 125°30′
Day		18	13	11	10	19	15
Item	Time / Z(m)	0918	1126	1150	1900	1200	0950
T °C	0	13.90	13.20	11.90	12.30	15.50	13.50
	10	14.25	12.81	—	—	—	—
	25	—	—	—	—	—	—
	50	—	—	—	—	—	—
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	13.42	12.45	12.03	12.42	14.25	12.95
S ‰	0	31.24	30.97	31.26	31.24	30.88	30.95
	10	31.06	31.04	—	—	—	—
	25	—	—	—	—	—	—
	50	—	—	—	—	—	—
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	31.02	31.00	31.33	31.15	30.86	—
Sounding (m)		30	27	16	20	16	14
Transp. (m)		5	1	8	8	1	7
Color		11	10	10	11	10	11
Wave		3	3	3	3	2	2
Swell		2	3	2	2	1	1
Air Temp. (°C)		15.1	14.5	15.8	14.2	16.5	15.5
Air Press. (mm)		762	750	750	752	762	763
Wind		E. 3	S. 3	NE. 2	SW. 1	S. 1	W. 1
Cloud		Cs. 9	St. 7	St. 8	St. 8	Ci. 2	St. 8
Weather		R	BC	C	C	B	C

May 1961

S_{18} 37°25′ 125°30′	S_{19} 37°20′ 125°30′	S_{20} 37°35′ 125°24′	S_{21} 37°33′ 125°24′	S_{22} 37°30′ 125°24′	S_{23} 37°30′ 125°24′
10	14	11	11	13	18
1653	1214	1245	1605	1245	1005
11.00	11.10	12.10	12.00	11.45	13.50
—	11.55	11.85	11.82	11.85	12.85
—	—	—	—	—	12.45
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
10.43	10.15	11.62	11.31	11.25	12.25
31.49	31.67	31.26	31.40	31.58	31.24
—	31.74	—	32.47	31.58	31.33
—	—	—	—	—	31.42
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—
31.76	31.67	31.33	31.40	31.58	31.47
13	30	17	22	32	43
5	5	0.5	2	2.5	1
11	11	8	10	10	10
3	3	4	3	4	3
3	2	2	2	3	2
14.5	14.0	15.5	14.8	15.3	15.8
752	765	750	750	752	763
SW. 1	NE. 2	NE. 1	NE. 1	S. 2	SW. 2
Cs. 9	St. 2	Cs. 8	St. 8	St. 7	St. 8
C	B	C	C	BC	C

Date		MDy 1961					
Station Number		S_{22}'' 37°30′ 125°24′	S_{22}''' 37°30′ 125°24′	S_{23} 37°28′ 125°24′	S_{24} 37°25′ 125°24′	S_{25} 37°20′ 125°24′	S_{26} 137°35′ 125°18′
Day		19	10	15	10	14	13
Item	Time / Z(m)	1810	1245	1025	1730	1115	1340
T °C	0	11.20	15.40	12.10	10.70	12.00	11.60
	10	—	—	—	—	—	11.85
	25	—	—	—	—	—	—
	50	—	—	—	—	—	—
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	11.45	13.58	11.35	10.83	11.42	10.92
S ‰	0	31.35	31.06	31.29	31.58	31.58	31.76
	10	—	—	—	—	—	31.74
	25	—	—	—	—	—	—
	50	—	—	—	—	—	—
	100	—	—	—	—	—	—
	150	—	—	—	—	—	—
	200	—	—	—	—	—	—
	300	—	—	—	—	—	—
	Botm.	31.26		31.49	31.62	31.40	31.74
Sounding (m)		18	15	16	13	12	33
Transp. (m)		0.5	1	0.5	0.5	0.5	1.5
Color		11	10	10	11	11	9
Wave		3	2	2	3	3	4
Swell		2	2	1	2	2	3
Air Temp. (°C)		13.9	16.0	15.6	14.0	14.0	14.5
Air Press. (mm)		754	761	763	752.5	765	757
Wind		SW. 1	S. 1	W. 1	SW. 1	NE. 2	N. 2
Cloud		St. 9	Ci. 2	St. 8	St. 8	St. 2	Cs. 7
Weather		C	B	C	C	B	BC

May 1961

S_{26}' 37°35′ 125°18′	S_{27} 37°33′ 125°18′	S_{28} 37°30′ 125°18′	S_{28}' 37°30′ 125°18′	S_{29} 37°28′ 125°18′	S_{30} 37°25′ 125°18′	S_{31} 37°20′ 125°18′
18	11	11	19	14	14	14
1045	1330	1515	1320	1625	0650	1015
13.30	11.80	11.80	15.10	11.50	11.70	12.50
12.85	10.63	12.19	13.95	11.76	—	12.25
12.25	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
12.09	10.98	11.26	12.35	11.59	11.72	10.92
31.18	31.58	31.49	31.17	—	31.49	31.33
31.26	31.63	31.42	31.46	—	—	31.33
31.53	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
31.49	31.62	31.46	31.58	—	31.47	31.67
34	24	22	18	24	18	29
1	1	1.2	1.5	1	0.5	0.5
10	7	9	10	10	11	11
3	4	3	2	2	3	3
2	3	2	1	2	2	2
14.9	15.4	15.5	16.8	13.5	13.5	14.4
762	750	750	762	765	765	765.5
SW. 2	NE. 2	NE. 2	S. 1	NE. 2	NE. 2	NE. 2
Ci. 8	St. 8	St. 9	Ci. 2	Ci. 3	Ci. 3	St. 2
C	C	C	B	BC	BC	B

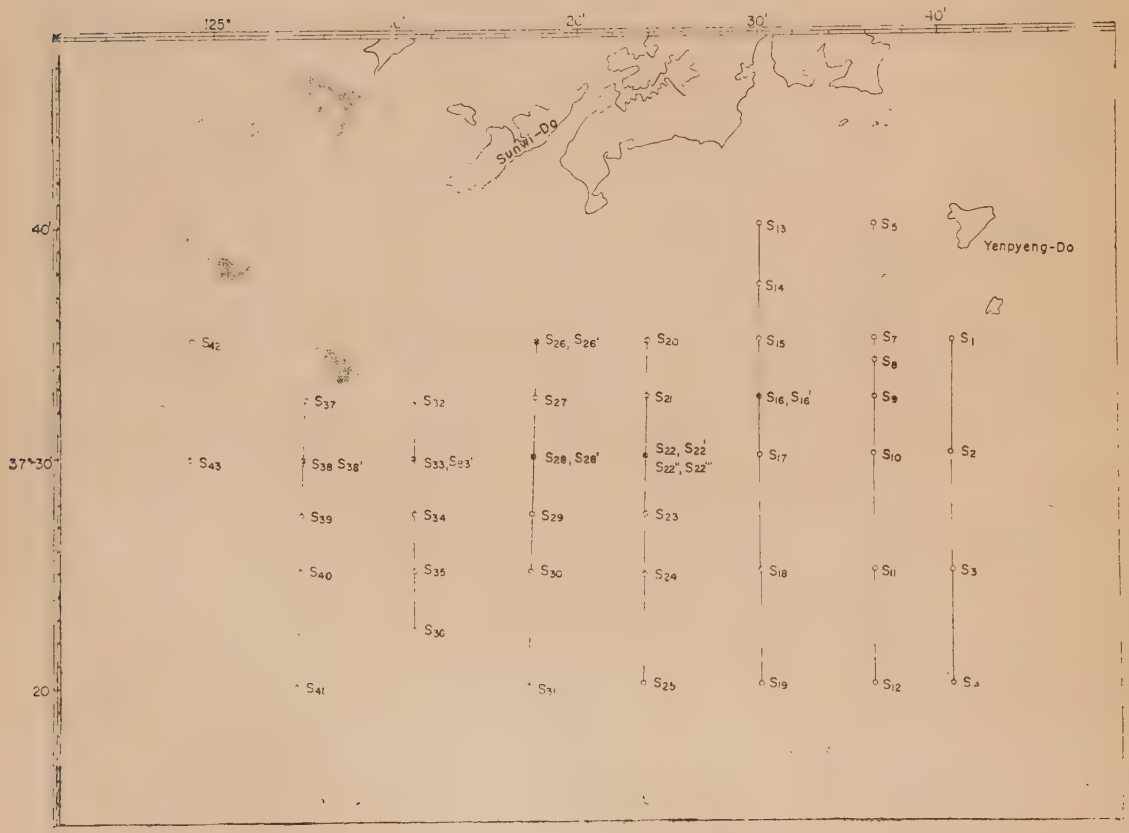
Date		May 1961						
Station Number		S_{32} 37°33′ 125°11′	S_{33} 37°30′ 125°11′	S_{33}' 37°30′ 125°11′	S_{34} 37°28′ 125°11′	S_{35} 37°25′ 125°11′	S_{36} 37°20′ 125°11′	S_{37} 37°33′ 125°05′
Day		13	13	19	13	14	14	13
Item	Time / Z(m)	1500	2010	1400	2035	0717	0925	1555
T °C	0	12.10	11.80	16.10	11.80	11.70	11.30	12.00
	10	11.75	—	12.65	—	—	11.48	11.15
	25	—	—	—	—	—	11.02	—
	50	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	10.95	11.45	11.69	11.48	10.85	10.82	10.72
S ‰	0	31.71	31.62	31.56	31.58	31.58	31.49	—
	10	31.67	—	31.67	—	—	31.49	—
	25	—	—	—	—	—	31.64	—
	50	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	31.67	31.53	31.67	31.58	31.67	31.67	—
Sounding (m)		30	20	24	18	22	35	33
Transp. (m)		1.5	—	2	—	2	1.2	4.4
Color		8	—	8	—	9	11	8
Wave		3	3	2	3	3	3	4
Swell		3	2	1	3	2	3	2
Air Temp. (°C)		14.5	12.2	16.3	12.2	13.6	13.8	15.0
Air Press. (mm)		764	765	762	762.5	765	795	762
Wind		S. 2	S. 2	S. 1	S. 2	NE. 2	NE. 2	S. 2
Cloud		St. 5	St. 6	Ci. 3	St. 4	Cs. 3	St. 2	St. 8
Weather		BC	BC	BC	BC	BC	B	C

May 1961

S_{38} 37°30′ 125°05′	S_{38}' 37°30′ 125°05′	S_{39} 37°28′ 125°05′	S_{40} 37°25′ 125°05′	S_{41} 37°20′ 125°05′	S_{42} 37°35′ 124°59′	S_{43} 37°30′ 124°59′
13	19	13	14	14	13	13
1840	1440	1108	0800	0840	1700	1753
11.60	13.60	11.62	11.50	11.70	11.80	11.80
11.32	13.25	10.65	11.62	11.62	11.05	11.08
—	—	—	10.32	10.15	9.78	10.25
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
10.18	11.82	9.35	9.25	9.08	9.65	8.52
31.76	31.58	31.58	31.58	31.58	31.67	31.67
31.74	—	31.58	31.58	30.79	31.67	31.58
—	—	31.71	30.81	31.83	31.76	31.76
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
—	—	—	—	—	—	—
31.74	31.94	31.98	31.85	31.78	31.76	31.83
24	—	35	31	49	35	57
2.5	—	5	5	5.5	5	6
6	—	5	6	5	7	6
3	—	3	3	3	5	4
3	—	3	2	2	3	3
12.5	—	12.5	13.4	13.4	14.2	12.8
765	—	765	764	765	762	764
S. 2	—	S. 2	NE. 2	NE. 2	S. 3	S. 3
Cc. 6	—	Cc. 5	St. 2	St. 2	St. 5	St. 3
BC	—	BC	B	B	BC	BC

제6도 연평도 근해 해양관측점 위치도(5월)

Fig. 6. Station Locations, West Coast (May)



C. 어청도 근해 해양관측성적. 5월(제7도)

West Coast, May (Fig. 7)

Date		① May 1961						
Station Number		S_1 36°05′ 126°23′	S_2 36°05′ 126°17′	S_3 36°05′ 126°11′	S_4 36°05′ 126°05′	S_5 36°05′ 125°59′	S_6 36°05′ 126°24′	S_7 36°05′ 126°24′
Day		25	25	25	25	25	26	27
Item	Time / Z(m)	0935	0850	0750	0643	0540	0800	0930
T °C	0	16.80	16.20	15.30	15.50	14.10	16.00	17.00
	10	—	13.60	13.10	13.00	11.50	15.80	16.00
	25	—	—	—	10.80	9.90	—	—
	50	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	14.50	13.50	12.60	10.70	9.20	15.70	16.00
S ‰	0	—	32.09	32.27	32.02	32.57	32.45	32.39
	10	—	32.14	32.14	32.11	32.39	32.14	32.11
	25	—	—	—	32.30	32.39	—	—
	50	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	32.14	32.14	32.20	32.32	32.50	32.14	32.45
Sounding (m)		14	22	25	32	55	25	17
Transp. (m)		7	8	7	8	7	4	3
Color		—	—	—	—	—	—	—
Wave		0	0	0	0	0	0	0
Swell		1	1	1	1	1	1	1
Air Temp. (°C)		16.9	16.8	15.8	16.5	15.0	18.6	19.5
Air Press. (mm)		772	772.5	772.5	772	772	768	768
Wind		SW. 1	—	—	SW. 1	S. 1	0	0
Cloud		Ci. 3	0	0	Ci. 1	Ci. 1	0	0
Weather		BC	B	B	B	B	B	B

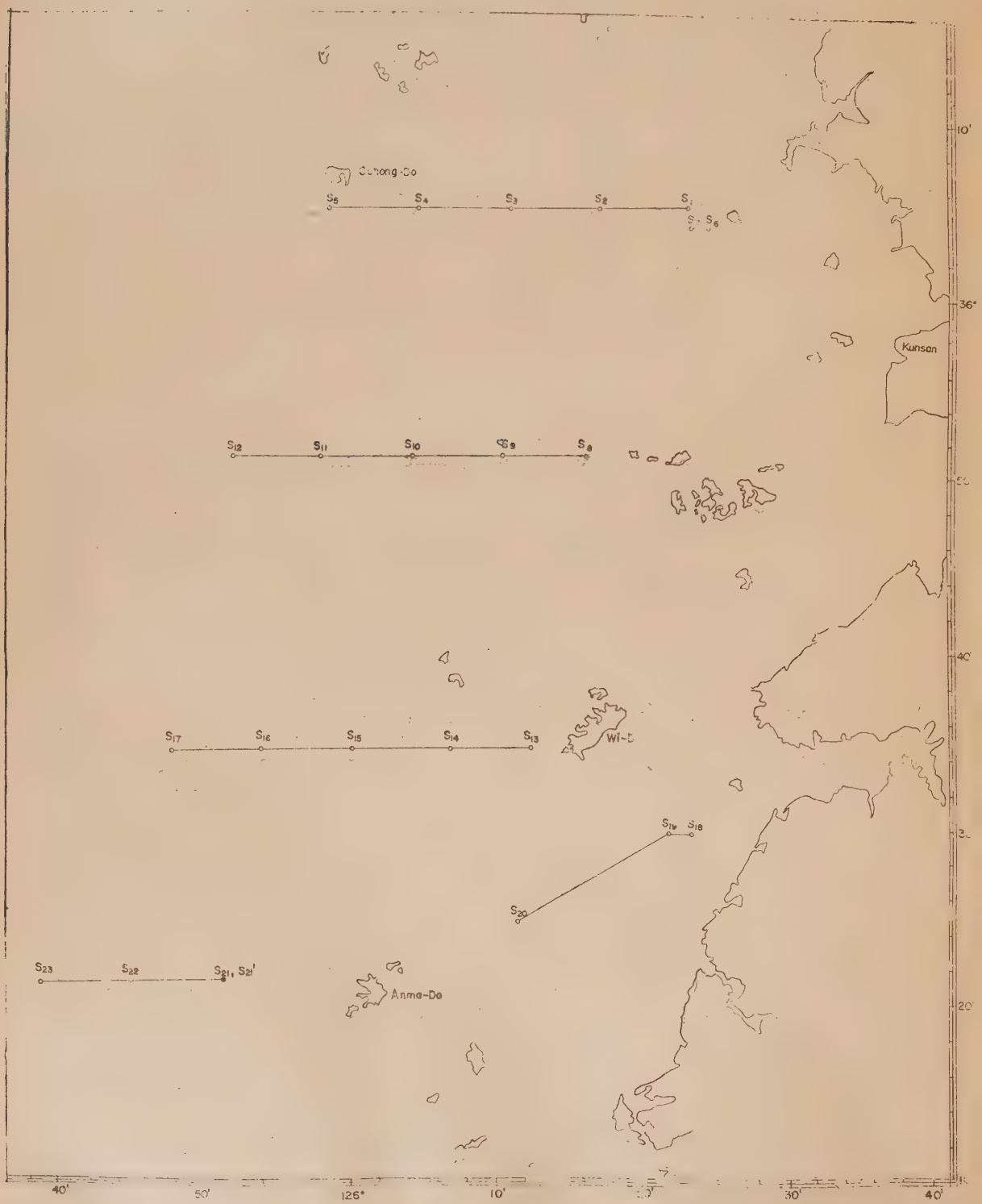
Date		May 1961						
Station Number		S_8 35°51′ 126°16′	S_9 35°51′ 126°10′	S_{10} 35°51′ 126°04′	S_{11} 35°51′ 125°58′	S_{12} 35°51′ 125°52′	S_{13} 35°34′ 126°12′	S_{14} 35°34′ 126°07′
Day		24	24	24	24	24	23	23
Item	Time / Z(m)	0820	0935	1045	1327	1430	0646	0748
T °C	0	14.50	14.80	15.40	16.60	18.40	14.20	14.70
	10	12.70	13.00	13.20	12.90	11.00	12.80	12.70
	25	12.10	11.60	11.50	11.45	10.20	—	—
	50	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	11.40	11.50	10.80	10.50	10.10	12.50	11.70
S ‰	0	31.92	32.07	32.11	32.23	32.38	31.89	31.85
	10	32.00	32.05	32.14	32.23	32.40	32.00	32.03
	25	32.05	32.14	32.23	32.23	32.45	—	—
	50	—	—	—	—	—	—	—
	100	—	—	—	—	—	—	—
	150	—	—	—	—	—	—	—
	200	—	—	—	—	—	—	—
	300	—	—	—	—	—	—	—
	Botm.	32.20	32.18	32.32	32.38	32.47	32.07	32.20
Sounding (m)		47	35	37	45	47	20	30
Transp. (m)		5	5.5	5	5	5	3	4
Color		—	—	—	—	—	—	—
Wave		0	1	0	1	1	1	1
Swell		0	1	1	0	1	1	1
Air Temp. (°C)		16.0	16.0	16.6	16.7	17.8	14.2	15.4
Air Press. (mm)		767	767	768	768	768	766.5	766.5
Wind		SW. 1	W. 1	W. 1	SW. 2	SW. 1	SW. 1	SW. 1
Cloud		0	Ci. 1	Ci. 1	Ci. 1	0	Ci. 3	Ci. 3
Weather		B	B	B	B	B	BC	BC

May 1961

S_{15} 35°34′ 126°00′	S_{16} 35°34′ 125°54′	S_{17} 35°34′ 125°48′	S_{18} 35°40′ 126°23′	S_{19} 35°30′ 126°22′	S_{20} 35°25′ 126°12′	S_{21} 35°21′ 125°51′	S_{21}' 35°21′ 125°51′	S_{22} 35°21′ 125°45′	S_{23} 35°21′ 125°38′
23	23	23	23	23	23	23	23	23	23
0945	1000	1114	2100	1945	1855	1630	1530	1440	1350
15.00	15.00	15.50	15.30	17.00	16.20	15.00	16.00	16.00	15.60
13.00	11.50	11.50	—	—	15.60	14.20	14.20	12.60	11.80
11.50	10.50	10.00	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
11.50	10.50	10.00	15.00	16.00	15.60	13.00	11.50	11.70	10.60
32.03	32.20	32.38	31.87	31.76	31.83	32.07	32.21	32.16	32.25
32.11	32.32	32.47	31.80	—	31.80	32.11	32.07	32.25	32.32
32.29	32.47	32.48	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
32.29	32.43	32.47	31.83	31.74	31.82	32.20	32.30	32.00	32.43
33	42	46	13	13	14	30	20	25	30
4	4	4.5	—	3.5	2.5	2	2.5	4	5
—	—	—	—	—	—	—	—	—	—
1	0	1	1	1	1	1	1	1	1
1	0	0	1	1	1	1	1	1	1
14.5	16.4	17.0	15.0	16.0	17.1	17.2	—	17.0	16.8
766.5	766.5	766.5	767	767	766	766	—	—	766.5
SW. 1	SW. 1	SW. 1	S. 1	S. 2	S. 1	S. 1	S. 1	SW. 2	SSW. 2
Ci. 3	Cc. 2	Ci. 4	Ci. 2	Ci. 4	Ci. 4	Ci. 4	Ci. 4	Ci. 3	Ci. 4
BC	B	BC	B	BC	B C	BC	BC	BC	BC

제7도 어청도 근해 해양관측점 위치도(5월)

Fig. 7. Station Locations, West Coast(May)



西紀1964年12月20日　印刷
西紀1964年12月25日　發行

編輯兼發行者　國立水產振興院

釜山市東區草梁洞1043番地
印刷所　新興印刷社
TEL ② 4385

海洋調査年報 正誤表

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Errata

頁 Page	行 Line	列 Column	誤 Error	正 Correct	頁 Page	行 Line	列 Column	誤 Error	正 Correct
37	4	2	128°59′	129°00′	73	20	6	34.54	—
44	15	5	0.64	—	73	19	7	34.51	—
44	15	6	0.71	—	74	9	2	100	75
44	15	7	0.92	—	74	11	2	200	150
44	25	5	34.07	—	74	18	2	100	75
44	25	6	34.05	—	74	20	2	200	150
44	25	7	34.15	—	76	9	2	100	75
44	25	8	34.05	—	76	11	2	200	150
44	25	9	34.15	—	76	18	2	100	75
55	25	9	182	125	106	上	上	601	106
69	10	10	16.72	16.07	100	8	下	Ouggiaea	Muggiaea
73	9	3	13.20	12.19	134	11	上	Choatoceros	Chaetoceros
73	10	3	12.19	—	161	9	下	Thalassiothrix Cal. fnimarchicus	Thalassionema Cal. finmarchicus
73	18	3	34.72	34.61	166	14	上		
73	19	3	34.61	—	185	6	5	10.26	—
73	10	4	14.08	13.10	185	5	8	10.20	11.50
73	11	4	13.10	—	185	6	9	6.48	—
73	20	4	34.72	—	203	26	10	32.09	—
73	10	5	14.08	—	205	9	6	8.15	—
73	19	5	34.63	—	211	8	3	11.85	—
73	10	6	12.33	—	219	17	4	31.80	—
73	19	6	34.58	—	219	2	9	3_{22}	S_{22}